

“EXHIBIT A”

**UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF TEXAS
WACO DIVISION**

MURRAY WALTER PISONY,

*Plaintiff/Counterclaim
Defendant,*

v.

COMMANDO CONSTRUCTION, INC.

*Defendant/Counterclaim
Plaintiff.*

Case No.: 6:17-cv-00055 RP-JCM

JURY DEMAND

**COMMANDO CONSTRUCTION INC.'S PRELIMINARY INVALIDITY
CONTENTIONS**

I. INTRODUCTION

Pursuant to the Scheduling Order, Defendant Commando Construction, Inc. (“CCI”) provides the following Preliminary Invalidity Contentions.

Plaintiff Murray Walter Pisony (“Pisony”) asserts claims 1, 2, 4 and 6 of U.S. Patent No. 7,591,629 (the “‘629 patent”). The asserted claims are herein collectively referred to as the “asserted claims.” These Preliminary Invalidity Contentions are limited to these asserted claims. Should Pisony be permitted to alter the asserted claims, CCI reserves its right to supplement and amend its Preliminary Invalidity Contentions.

Discovery and CCI’s investigation is far from complete at this stage. It is possible that CCI will hereafter discover additional prior art pertinent to the asserted claims, and/or learn of earlier priority dates of art, and CCI reserves its right to seek to amend and/or supplement these contentions within a reasonable time after becoming aware of additional prior art. Prior art not included in these Preliminary Invalidity Contentions, whether known or unknown to CCI, may become relevant based on subsequent events. In particular, CCI is currently unaware of the extent, if any, to which Pisony will contend that limitations of the asserted claims are not disclosed in the prior art identified by CCI. To the extent that such an issue arises, CCI reserves the right to identify other references, including in the file histories of the asserted patents, that would anticipate or render obvious the allegedly missing limitation(s) of the asserted claims. Moreover, despite commencing this litigation over one year ago, Pisony only recently began producing documents, and in the prior weeks before the deadline for the Preliminary Invalidity Contentions, made a series of mass document productions including 5,937 separate documents constituting 23142 pages. CCI has not had sufficient time to review all of these documents, and therefore reserves its right

to amend these Preliminary Invalidity Contentions if relevant prior art or other information is discovered in Pisony's documents.

CCI also reserves its right to supplement and/or amend these Invalidity Contentions after the Court has construed disputed claim terms. CCI's ultimate contentions concerning the validity of the claims of the '629 patent may change based upon the Court's construction of the claims or positions that Pisony may take concerning infringement or validity issues after such construction. Nothing contained in these Preliminary Invalidity Contentions or any accompanying exhibits or claim charts, however, should be understood or deemed to be an express or implied admission or contention with respect to the proper construction or scope of any terms in the asserted claims, nor should they be understood to adopt Pisony's stated claim construction or its proposed scope of the asserted claims.

II. INVALIDITY

A. Invalidity Under 35 U.S.C. §§ 102 and/or 103

Below CCI provides specific portions of prior art references that disclose the elements of the asserted claims and render the claims anticipated and/or obvious under 35 U.S.C. §§ 102 and/or 103. Although CCI has identified at least one citation per element for each reference, each and every disclosure of the same

element in the reference is not necessarily identified. The lack of a citation for an element should not be deemed an admission that the element is not disclosed or is not inherent in the reference. In an effort to focus the issues, CCI identifies only exemplary portions of cited references. It should be recognized that persons of ordinary skill in the art will generally read a prior art reference as a whole and in the context of other publications and literature and in light of the knowledge of one of ordinary skill in the art. To understand and interpret any specific statement or disclosure within a prior art reference, such persons would rely on other information within the reference, along with other publications and their scientific or engineering knowledge. CCI consequently reserves the right to rely upon other unidentified portions of the prior art references and on other publications and expert testimony as to the knowledge of a person of ordinary skill to provide context, and as aids to understanding and interpreting the portions that art identified. CCI also reserves the right to rely on other portions of the prior art references, other publications, and the testimony of experts to establish that a person of ordinary skill in the art would have been motivated to modify or combine certain cited references so as to render the claims obvious. Further, where CCI identifies a particular figure in a prior art reference, the identification should be understood to encompass the caption and description of the figure and any text relating to the figure in addition to the figure itself. Similarly, where an identified

portion of text refers to a figure, the identification should be understood to include the figure as well.

1. Patents, Printed Publications, and Prior Use

CCI identifies the following prior art patents and printed publications that render the Asserted Claims invalid under at least 35 U.S.C. §§ 102 (b) and/or 35 U.S.C. § 103:

- Canadian Patent Application 2315046 (McLeod/Pisony), filed on August 3, 2000, published on February 3, 2002, and titled “Collection and Stacking of Lumber Pieces from the Ground”; McLeod/Pisony is prior art to the ‘629 patent under 35 U.S.C. § 102(b) (CCI0004574-0004622);
- U.S. Patent No. 5,934,861 (McLeod), issued August 10, 1999 and titled “Collection of Lumber Pieces from Spaced Stacks”; McLeod is prior art to the ‘629 patent under 35 U.S.C. § 102(b) (CCI0001700-0001706);
- The original 2000 Skid Hustler machine, completed on or around August 2000; the 2000 Skid Hustler machine is prior art to the ‘629 patent under 35 U.S.C. § 102(b) (documents reflecting the original 2000 Skid Hustler machine are located at (CCI0002056-0002059; CCI0003683; CCI0003687; CCI0003695-0003718);

- U.S. Patent No. 3,651,963 (McWilliams), issued March 28, 1972 and titled “Apparatus for Loading Bagged Mail from a Loading Dock into a Highway Vehicle”; McWilliams is prior art to the ‘629 patent under 35 U.S.C. § 102(b) (CCI0003688-0003694);
- U.S. Patent No. 3,315,795 (Ross), issued April 25, 1966 and titled “Loader Conveyor for System”; Ross is prior art to the ‘629 patent under 35 U.S.C. § 102(b) (CCI0004911-0004919);
- U.S. Patent No. 6,176,283 (Knerr), issued January 23, 2001 and titled Adjustable Support for Conveyor; Knerr is prior art to the ‘629 patent under 35 U.S.C. § 102(b) (CCI0003660-0003672);
- U.S. Patent No. 6,152,026 (Simpson), issued November 28, 2000 and titled “System for Baling Farm Products”; Simpson is prior art to the ‘629 patent under 35 U.S.C. § 102(b) (CCI0001436-0001459);
- U.S. Patent No. 4,653,555 (Mellgren), issued March 31, 1987 and titled “Feller-Forwarder”; Mellgren is prior art to the ‘629 patent under 35 U.S.C. § 102(b) (CCI0003618-0003626);
- U.S. Patent No. 3,889,796 (Bailey), issued June 17, 1975 and titled “Harvester Boom Control”; Bailey is prior art to the ‘629 patent under 35 U.S.C. § 102(b) (CCI0003603-0003610);

- U.S. Patent No. 4,290,820 (Swisher), issued September 22, 1981 and titled “Method and Apparatus for Collecting Particulate Material on a Roadway”; Swisher is prior art to the ‘629 patent under 35 U.S.C. § 102(b) (CCI0001757-1776);
- U.S. Patent No. 5,745,947 (Liu), issued May 5, 1998 and titled “Automatic Debris Retrieval System”; Liu is prior art to the ‘629 patent under 35 U.S.C. § 102(b) (CCI0001840-0001905);
- U.S. Patent No. 5,697,753 (Aurora), issued December 16, 1997 and titled “Semiautomatic Stacker for Stackable Articles”; Aurora is prior art to the ‘629 patent under 35 U.S.C. § 102(b) (CCI0000983-0001002).

2. Representative Claim Charts

CCI contends that each of the asserted claims is anticipated by and/or is rendered obvious in view of one or more of the items or prior art identified above, either alone or in combination. Although CCI reserves the right to rely on other prior art disclosed or incorporated by reference herein, CCI identifies below representative prior art that renders invalid one or more of the asserted claims and includes accompanying claim charts that identify where specifically in each item of prior art each element of each asserted claim is found.

Exhibit	Claim	Reference(s)
A	Claims 1, 2, 4 and 6	McLeod/Pisony
B	Claims 1, 2, 4 and 6	McLeod/Pisony and McLeod
C	Claims 1, 2, 4 and 6	2000 Skid Hustler machine and McLeod/Pisony
D	Claims 1, 2, 4 and 6	McLeod/Pisony and McWilliams
E	Claims 1, 2, 4 and 6	McLeod/Pisony and Ross
F	Claims 1, 2, 4 and 6	McLeod/Pisony and Knerr
G	Claims 1, 2, 4 and 6	McLeod/Pisony and Simpson
H	Claims 1, 2, 4 and 6	McLeod/Pisony and Mellgren
I	Claims 1, 2, 4 and 6	McLeod/Pisony and Baily
J	Claims 1, 2, 4 and 6	McLeod/Pisony and Swisher
K	Claims 1, 2, 4 and 6	McLeod/Pisony and Liu
L	Claims 1, 2, 4 and 6	McLeod/Pisony and Aurora

a. McLeod/Pisony

Claims 1, 2, 4 and 6 of the '629 patent are anticipated by McLeod/Pisony under 35 U.S.C. § 102(b). Exhibit A identifies where each element of claims 1, 2, 4 and 6 of the '629 patent is found in the disclosure of McLeod/Pisony.

b. McLeod/Pisony and McLeod

To the extent McLeod/Pisony, Exhibit A, is not considered a single reference, Claims 1, 2, 4 and 6 of the '629 patent are obvious in view of McLeod/Pisony and McLeod under 35 U.S.C. § 103. Exhibit B identifies where each element of claims 1, 2, 4 and 6 of the '629 patent is found in the disclosures of McLeod/Pisony and McLeod.

c. 2000 Skid Hustler machine and McLeod/Pisony

Claims 1, 2, 4 and 6 of the '629 patent are obvious in view of the 2000 Skid Hustler machine and McLeod/Pisony under 35 U.S.C. § 103. Exhibit C identifies where each element of claims 1, 2, 4 and 6 of the '629 patent is found in the disclosures of the 2000 Skid Hustler machine and McLeod/Pisony.

d. McLeod/Pisony and McWilliams

Claims 1, 2, 4 and 6 of the '629 patent are obvious in view of McLeod/Pisony and McWilliams under 35 U.S.C. § 103. Exhibit D identifies

where each element of claims 1, 2, 4 and 6 of the '629 patent is found in the disclosures of McLeod/Pisony and McWilliams.

e. McLeod/Pisony and Ross

Claims 1, 2, 4 and 6 of the '629 patent are obvious in view of McLeod/Pisony and Ross under 35 U.S.C. § 103. Exhibit E identifies where each element of claims 1, 2, 4 and 6 of the '629 patent is found in the disclosures of McLeod/Pisony and Ross.

f. McLeod/Pisony and Knerr

Claims 1, 2, 4 and 6 of the '629 patent are obvious in view of McLeod/Pisony and Knerr under 35 U.S.C. § 103. Exhibit F identifies where each element of claims 1, 2, 4 and 6 of the '629 patent is found in the disclosures of McLeod/Pisony and Knerr.

g. McLeod/Pisony and Simpson

Claims 1, 2, 4 and 6 of the '629 patent are obvious in view of McLeod/Pisony and Simpson under 35 U.S.C. § 103. Exhibit G identifies where each element of claims 1, 2, 4 and 6 of the '629 patent is found in the disclosures of McLeod/Pisony and Simpson.

h. McLeod/Pisony and Mellgren

Claims 1, 2, 4 and 6 of the '629 patent are obvious in view of McLeod/Pisony and Mellgren under 35 U.S.C. § 103. Exhibit H identifies where

each element of claims 1, 2, 4 and 6 of the '629 patent is found in the disclosures of McLeod/Pisony and Mellgren.

i. McLeod/Pisony and Bailly

Claims 1, 2, 4 and 6 of the '629 patent are obvious in view of McLeod/Pisony and Bailly under 35 U.S.C. § 103. Exhibit I identifies where each element of claims 1, 2, 4 and 6 of the '629 patent is found in the disclosures of McLeod/Pisony and Bailly.

j. McLeod/Pisony and Swisher

Claims 1, 2, 4 and 6 of the '629 patent are obvious in view of McLeod/Pisony and Swisher under 35 U.S.C. § 103. Exhibit J identifies where each element of claims 1, 2, 4 and 6 of the '629 patent is found in the disclosures of McLeod/Pisony and Swisher.

k. McLeod/Pisony and Liu

Claims 1, 2, 4 and 6 of the '629 patent are obvious in view of McLeod/Pisony and Liu under 35 U.S.C. § 103. Exhibit K identifies where each element of claims 1, 2, 4 and 6 of the '629 patent is found in the disclosures of McLeod/Pisony and Liu.

l. McLeod/Pisony and Aurora

Claims 1, 2, 4 and 6 of the '629 patent are obvious in view of McLeod/Pisony and Aurora under 35 U.S.C. § 103. Exhibit L identifies where

each element of claims 1, 2, 4 and 6 of the '629 patent is found in the disclosures of McLeod/Pisony and Aurora.

m. Anticipation and Obviousness

The United States Supreme Court clarified in *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398 (2007), the standard for what types of inventions are patentable, and emphasized that inventions arising from ordinary innovation, ordinary skill, or common sense are not patentable. In that regard, a patent claim may be obvious if the combination of elements was obvious to try or there existed at the time of the invention a known problem for which there was an obvious solution encompassed by the patent's claims. *Id.* at 402, 420. In addition, when a reference is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. *Id.* at 401, 420. "If a person of ordinary skill in the art can implement a predictable variation . . . § 103 likely bars its patentability." *Id.* at 401.

Each of the prior art references identified herein as an anticipatory reference alternatively, under the doctrine of single reference obviousness, renders obvious each asserted claim for which it is listed above when it is combined with information known to one of ordinary skill in the art at the time of the alleged invention. One of ordinary skill in the art would have been motivated to modify

each of the anticipatory references to make obvious the limitations of each asserted claim for which it was cited above.

3. Motivations to Combine

A person of ordinary skill in the art would have been motivated to combine the references identified above and in the attached exhibits for numerous reasons at the relevant time. In general, the reason, motivation, or suggestion to modify or combine the references in the manner claimed can be found in the explicit and/or implicit teachings and the prior art as a whole, the general knowledge of those skilled in the art, including knowledge of trends in the field and knowledge that the art is of special interest or importance in the field, and from the fact that the references are in the same field of endeavor and/or seek to solve a common problem.

One of ordinary skill in the art would have been motivated to investigate the various existing solutions, systems, publications, and/or patents describing the field to address his particular needs. A person of ordinary skill would have been motivated to combine the identified prior art based on the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art. These combinations and modifications of the prior art which render obvious the asserted claims of the patents-in-suit arise from ordinary innovation, ordinary skill, common sense, or would have been obvious to try or otherwise

predictable. Design improvements and other market forces would have prompted those combinations and modifications.

At the time of the alleged invention claimed in the '629 patent, a person of ordinary skill in the art would have been motivated to combine McLeod/Pisony with any of the other prior art references cited herein, as discussed below.

Further, a person of skill in the art would have been motivated to combine the grapple assembly described in McLeod/Pisony with the 2000 Skid Hustler machine, because the 2000 Skid Hustler machine is a commercial embodiment of the invention claimed in McLeod/Pisony, and McLeod/Pisony expressly describes a grapple assembly as an alternative to the claimed picking assembly, which has benefits known to those skilled in the art at the time of the alleged invention.

a. McLeod/Pisony and McLeod

A person of skill in the art would have been motivate to combine McLeod/Pisony with McLeod at least because McLeod is expressly incorporated by reference in McLeod/Pisony and is described as follows: “While this proposal included a number of basic principles which are used herein and which *form the basis of this invention*, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” Mcleod/Pisony, 1:55-59.

b. McLeod/Pisony and McWilliams

A person of skill in the art would have been motivate to combine McLeod/Pisony with McWilliams at least because both describe apparatuses designed to automatically adjust the angle of a conveyer assembly relative to a chassis and the approach angle of the conveyer relative to the structure receiving the materials transported on the conveyer. Moreover, during prosecution of the U.S. Patent Application No. 12/539,740, filed by Pisony and claiming priority to the ‘629 patent, the examiner cited McWilliams as invalidating prior art. Specifically, the examiner rejected dependent claim 15, which claimed “The apparatus of claim 12 further comprising a mast assembly for raising the lowering the conveyor assembly,” under 35 U.S.C. § 103 because “it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of McLeod [CA 2315046] to include McWilliams mast

assembly which improves article placement in a vehicle.” June 14, 2010 Office Action, p. 5.

c. McLeod/Pisony and Ross

A person of skill in the art would have been motivate to combine McLeod/Pisony with Ross at least because both describe apparatuses designed to automatically adjust the angle of a conveyer assembly relative to a chassis and the approach angle of the conveyer relative to the structure receiving the materials transported on the conveyer.

d. McLeod/Pisony and Knerr

A person of skill in the art would have been motivated to combine McLeod/Pisony with Knerr at least because both are in the same field of endeavor, i.e., adjustable conveyer assemblies used to transport lumber. Further, both references describe apparatuses designed to automatically adjust the angle of a conveyer assembly relative to a chassis and the approach angle of the conveyer relative to the structure receiving the materials transported on the conveyer.

e. McLeod/Pisony and Simpson

A person of skill in the art would have been motivated to combine McLeod/Pisony with Simpson at least because both references describe

apparatuses designed to automatically adjust the approach angle of the conveyer relative to the structure receiving the materials transported on the conveyer.

f. McLeod/Pisony and Mellgren

A person of skill in the art would have been motivated to combine McLeod/Pisony with Mellgren at least because both are in the same field of endeavor, i.e., heavy machinery used for collecting lumber. Further, both references describe apparatuses designed to level portions of the machine to enable the use of the machines on rough and uneven terrain.

g. McLeod/Pisony and Baily

A person of skill in the art would have been motivated to combine McLeod/Pisony with Baily at least because both references describe apparatuses designed to automatically adjust the angle of a conveyer assembly relative to a chassis and the approach angle of the conveyer relative to the structure receiving the materials transported on the conveyer.

h. McLeod/Pisony and Swisher

A person of skill in the art would have been motivated to combine McLeod/Pisony with Swisher at least because both references describe apparatuses designed to automatically adjust the angle of a conveyer assembly relative to a

chassis and the approach angle of the conveyer relative to the structure receiving the materials transported on the conveyer.

i. McLeod/Pisony and Liu

A person of skill in the art would have been motivated to combine McLeod/Pisony with Liu at least because both references describe apparatuses designed to automatically adjust the angle of a conveyer assembly relative to a chassis and the approach angle of the conveyer relative to the structure receiving the materials transported on the conveyer.

j. McLeod/Pisony and Aurora

A person of skill in the art would have been motivated to combine McLeod/Pisony with Aurora at least because both references describe apparatuses designed to automatically adjust the angle of a conveyer assembly relative to a chassis and the approach angle of the conveyer relative to the structure receiving the materials transported on the conveyer.

B. Other Invalidity Grounds

Based on Pisony's infringement contentions, which appear to construe the claim term "extendible mast" in an exceedingly broad manner, the asserted claims of the '629 patent are invalid for lack of written description and/or enablement under 35 U.S.C. § 112 ¶ 1, and for failing to comply with the definiteness

requirements of 35 U.S.C. § 112 ¶ 2. CCI contends that each dependent claim depending from independent claim 1 as identified below, is also invalid for the same reasons independent claim 1 is invalid. CCI further expressly reserves the right to raise and address, once the parties have exchanged claim terms and constructions, any indefiniteness issues arising out of those exchanges.

1. Lack of Written Description

The asserted claims are the ‘629 patent are invalid under § 112 ¶ 1 for failing to particularly point out and distinctly claim the subject matter which the patentee regards as its alleged invention such that one skilled in the relevant art would be reasonably apprised of the bounds of the asserted claims when read in light of the specification. To satisfy the written description requirement, the patent “must clearly allow persons of ordinary skill in the art to recognize that the inventor invented what is claimed.” *Ariad Pharm., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (*en banc*); *see Kao Corp. v. Unilever U.S., Inc.*, 441 F.3d 963, 967–68 (Fed. Cir. 2006). The specifications of the ‘629 patent fails to meet the written description requirement of § 112 ¶ 1 with respect to the asserted claims because, among other reasons, one skilled in the art could not clearly conclude from the patent that the inventor possessed an invention that includes all of the claimed limitations.

To satisfy the written description requirement, the specification must “reasonably convey[] to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date” of the patent. *Rivera v. Int'l Trade Comm'n*, 857 F.3d 1315, 1319 (Fed. Cir. 2017) (quoting *Ariad Pharm., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc)). The purpose of the written description requirement is “to ensure that the scope of the right to exclude, as set forth in the claims, does not overreach the scope of the inventor’s contribution to the field of art as described in the patent specification.” *Reiffin v. Microsoft Corp.*, 214 F.3d 1342, 1345 (Fed. Cir. 2000). “Accordingly, claims added during prosecution must find support sufficient to satisfy § 112 in the written description of the original priority application.” *Novozymes A/S v. DuPont Nutrition Biosciences APS*, 723 F.3d 1336, 1344 (Fed. Cir. 2013).

Under Pisony’s implied construction of the claim term “extendible mast” in claim 1, a person of skill in the art would not be reasonably apprised of the bounds the claim when read in light of the specification. Indeed, while the specification provides a description of a vertical mast that may be varied in length, there is absolutely no description of an “extendible mast” that is rigid and horizontal and no indication in the specification that an “extendible mast” can includes such a broad universe of configurations to raise and lower a conveyer assembly.

Accordingly, under Pisony’s unreasonably broad construction of at least this claim term, the asserted claims are invalid for lack of written description under § 112 ¶ 1

2. Lack of Enablement

Section 112 ¶ 1 also requires a patent to describe “the manner and process of making and using [the claimed invention], in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same.” A patent must disclose enough to permit a person of skill in the art, after reading the specification, to “practice the claimed invention without undue experimentation.” *Sitrick v. Dreamworks, LLC*, 516 F.3d 993, 999 (Fed. Cir. 2008). Moreover, “[t]he full scope of the claimed invention must be enabled.” *Id.* at 999–1000 (“Because the asserted claims are broad enough to cover both movies and video games, the patents must enable both embodiments.”). “Enabling the full scope of each claim is ‘part of the quid pro quo of the patent bargain.’” *Id.*

Under Pisony’s implied construction of the claim term “extendible mast” in claim 1 as encompassing a rigid, horizontal structure, the full scope of the alleged invention is not enabled. The specification only describes a vertical mast assembly, and the only description of any sort of “extendible mast” is one that telescopes upwardly. Accordingly, to the extent the claim term “extendible mast”

encompasses a rigid, non-extendible, horizontal structure, the full scope of this claim term is invalid for lack of enablement.

3. Indefiniteness

The asserted claims of the ‘629 patent is also invalid as indefinite because it contain at least one term or limitation that fails to inform those skilled in the art “with reasonable certainty . . . about the scope of the inventions.” *Nautilus, Inc. v. Biosig Instr., Inc.*, 134 S. Ct. 2120, 2124 (2014). Although the question of whether a given claim term is indefinite may turn on claim construction positions (including claim construction positions advocated by Pisony), CCI alleges that the asserted claims identified above are invalid because they include limitations and/or claim terms that fail to satisfy the definiteness requirement of 35 U.S.C. § 112 ¶ 2.

Under Pisony’s implied construction of the claim term “extendible mast” in claim 1 as encompassing a rigid, horizontal structure, the claim term “extendible mast” is indefinite. The term “extendible mast” does not appear in the written description of the ‘629 patent, and the plain and ordinary meaning of the term, and the only embodiment of an “extendable mast” described in the specification, does not inform a person of skill in the art with reasonable certainty that this claim term purportedly encompasses rigid, horizontal structures. Accordingly, under Pisony’ construction of the claim term “extendible mast,” the asserted claims of the ‘629 patent are invalid as indefinite under of 35 U.S.C. § 112 ¶ 2.

DATE: April 9, 2018

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that on this 9th day of April 2018, I caused a true and correct copy of the foregoing document to be served via email on the following counsel of record:

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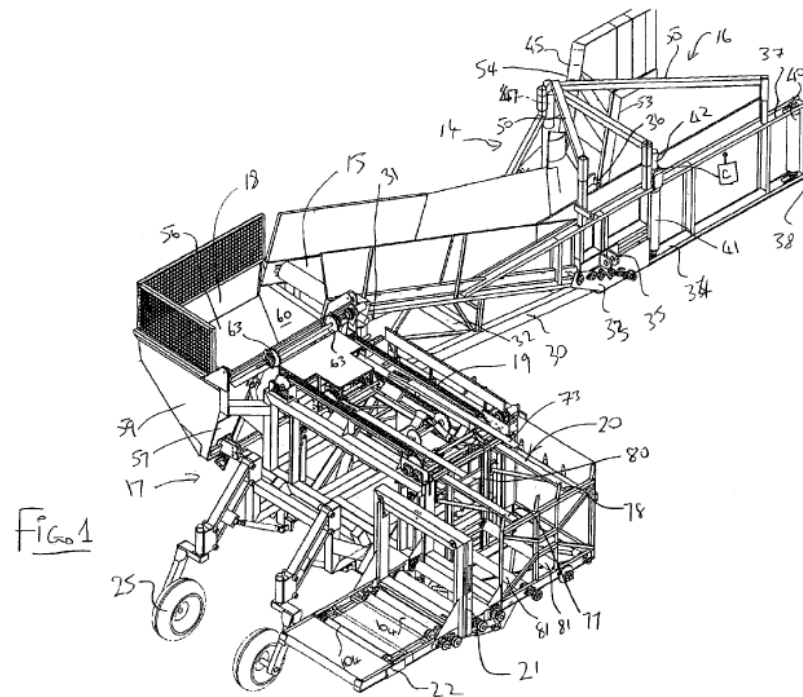
/s/ Daisy Manning

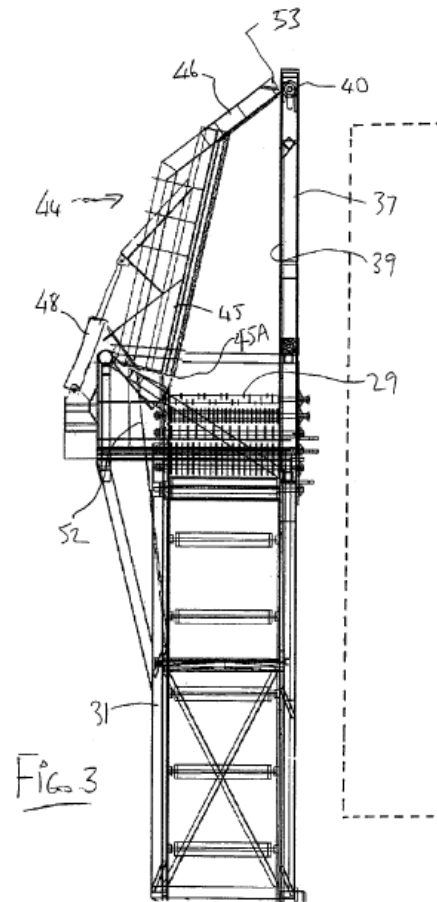
EXHIBIT A

Invalidity Contentions Claim Chart for U.S. Patent No. 7,591,629
Claims 1, 2, 4 and 6 in view of McLeod/Pisony under 35 U.S.C. § 102(b)

Claim 1	McLeod/Pisony
An apparatus for picking up, stacking and bundling lumber, comprising:	The preamble is not a limitation. However, to the extent it could be construed to be a limitation, the '202 patent discloses an apparatus for picking up, stacking and bundling lumber": "[a]n apparatus for picking, conveying, stacking and bundling lumber pieces from the grounds ..." McLeod/Pisony, Abstract (57)
(a) a chassis,	"The elements provided by the picking and conveyer assembly 14 , the stacking assembly 17 and the bundling assembly 21 are all mounted on a frame for common movement with the vehicle 10 in the working direction 13 . The frame carrying these elements is attached to the vehicle by a four point hitch 23 at the rear of the vehicle and by coupling assembly generally indicated at 24 at the side of the vehicle and inwardly of the picking and conveyer assembly 14 . McLeod/Pisony, p. 11, l. 23-p. 12, l. 3.

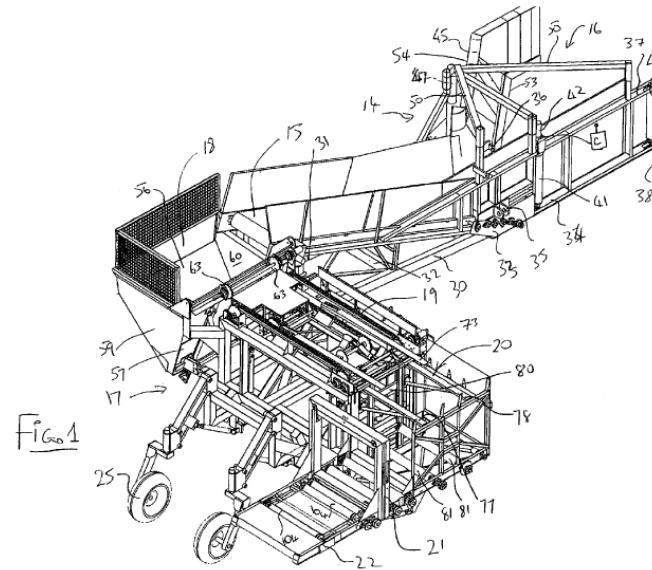
(b) a grapple carried with the chassis,	<p>“Such an arrangement can also be used with a picking assembly in the form of a mechanically operated grapple which lifts the pieces from a large pile of the pieces for formation into stacks which are bundled and discharged. Again therefore this device in combination with a grapple type picking assembly is portable on a suitable trailer or frame carried by a vehicle so that it can be moved to a pile or collection of the piecing for stacking.” McLeod/Pisomy, p. 13, ll. 2-7.</p>
(c) a conveyor assembly supported on the chassis,	<p>“The apparatus further includes a picking and conveyer assembly 14 having a main conveyer 15 attached to and arranged rearwardly of a picker 16.” ‘202 patent, 4:45-47. The elements provided by the picking and conveyer assembly 14, the stacking assembly 17 and the bundling assembly 21 are all mounted on a frame for common movement with the vehicle 10 in the working direction 13. McLeod/Pisomy, p. 11, ll. 18-25.</p>

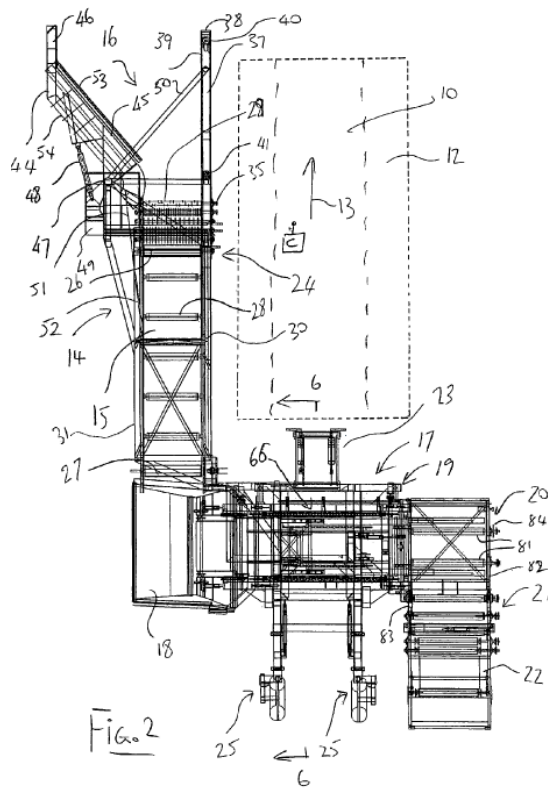




(d)) a stacking assembly operatively connected adjacent the conveyor assembly, the stacking assembly including an unscrambling hopper, a row conveyor, a stacking bin and a bundling assembly, and,

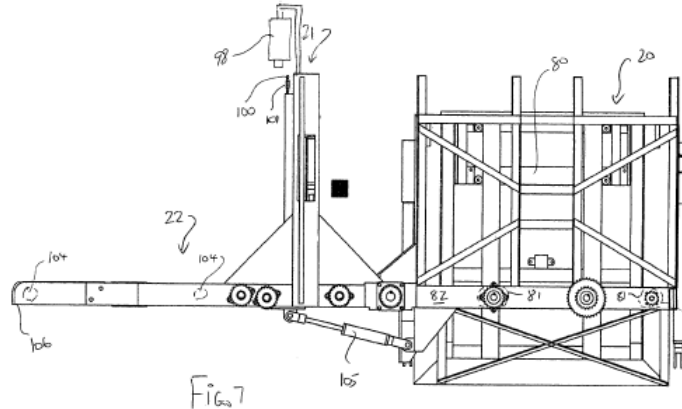
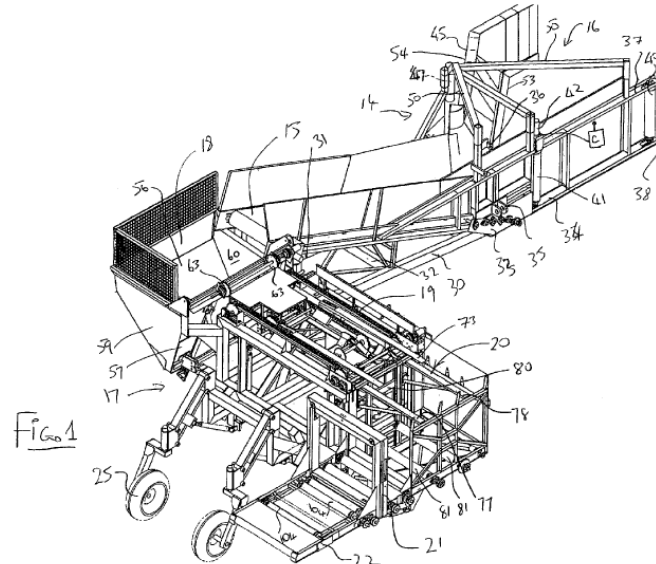
“At the rear of the conveyor **15** is provided a stacking assembly **14** generally indicated at **17** including an unscrambling hopper **18**, a row conveyor **19** and a stacking assembly **20**. The apparatus further including a bundling assembly **21** including a discharge ramp **22**.” ‘202 patent, 4:47-52. The elements provided by the picking and conveyor assembly **14**, the stacking assembly **17** and the bundling assembly **21** are all mounted on a frame for common movement with the vehicle **10** in the working direction **13**. McLeod/Pisony, p. 11, ll. 19-25.





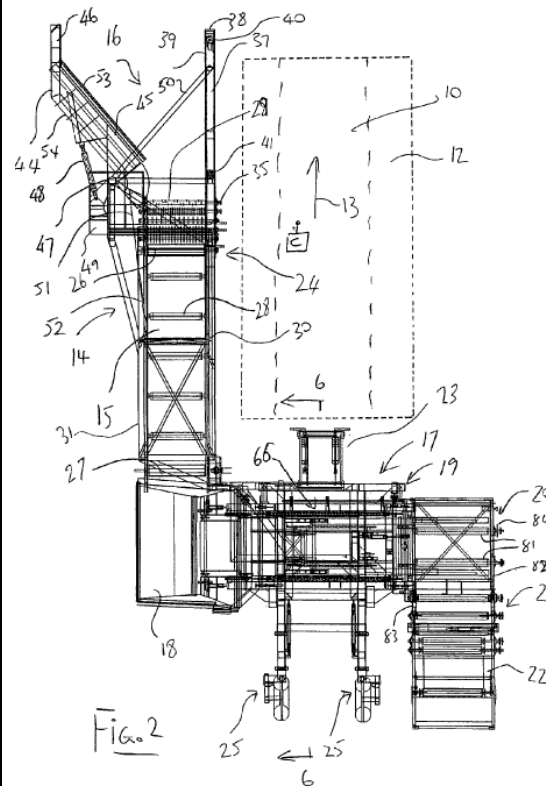
(e) a discharge platform operatively connected adjacent the bundling assembly,

The apparatus further including a bundling assembly **21** including a discharge ramp **22**.” McLeod/Pisomy, p. 11, ll. 22-23.

	 <p>Fig. 7</p>
<p>(f) wherein the conveyor assembly includes a frame,</p>	<p>“The conveyor is mounted on a frame section of the main frame having a first side 30 and a second side 31. McLeod/Pisony, p. 14, ll. 10-12.</p>  <p>Fig. 4</p>
<p>a pivotal connection for the frame to permit angular adjustment of the frame</p>	<p>“The side wall 30 includes mounting lugs 35 and 36 for receiving support elements of a coupling 24 which connects the side of the vehicle to the sidewall 30.</p>

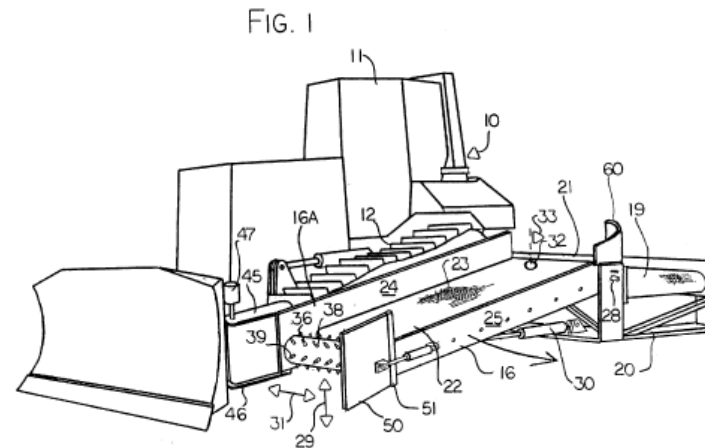
relative to the chassis,

The coupling element **24** includes a link which allows the frame to pivot inwardly and outwardly about a horizontal axis parallel to the direction **13** so that the picking section can pivot outwardly and upwardly or outwardly and downwardly to accommodate changes in ground contour. In addition to the angle of the bottom skid **34** about a horizontal pivot axis transverse to the direction **13** can be changed by actuating the four point hitch connection **23** and/or by lifting the linkage **24**.”
McLeod/Pisomy, p. 14, ll. 19-25.

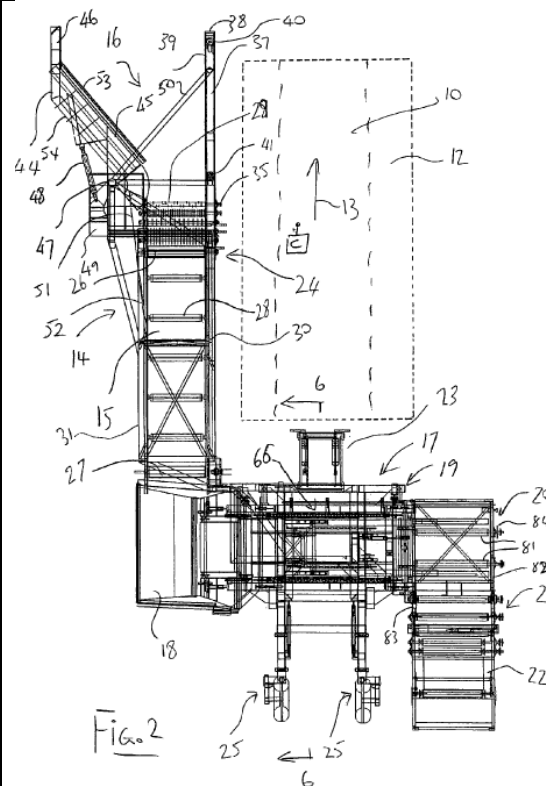


“In US patent 5934861 issued August 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2241682 published 26th February 1999, a first proposal was made for a machine which picks up the pieces and conveys

them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisony, p. 2, ll. 10-16. “The conveyer table **16** is mounted for pivotal movement about a horizontal pivot shaft **28** defining a pivot axis adjacent the feed end **17a** for upward and downward vertical movement **29** of the forward end **27** of the conveyer table. Actuation of the vertical movement **29** is effected by a hydraulic drive cylinder **30** connected between the frame **20** and the underside of the conveyer table.” ‘861 patent, 2:66-3:5; “means mounting the conveyor table for movement of the forward end vertically up and down for adjustment of the height of the forward end.” ‘861 patent, 4:38-40.

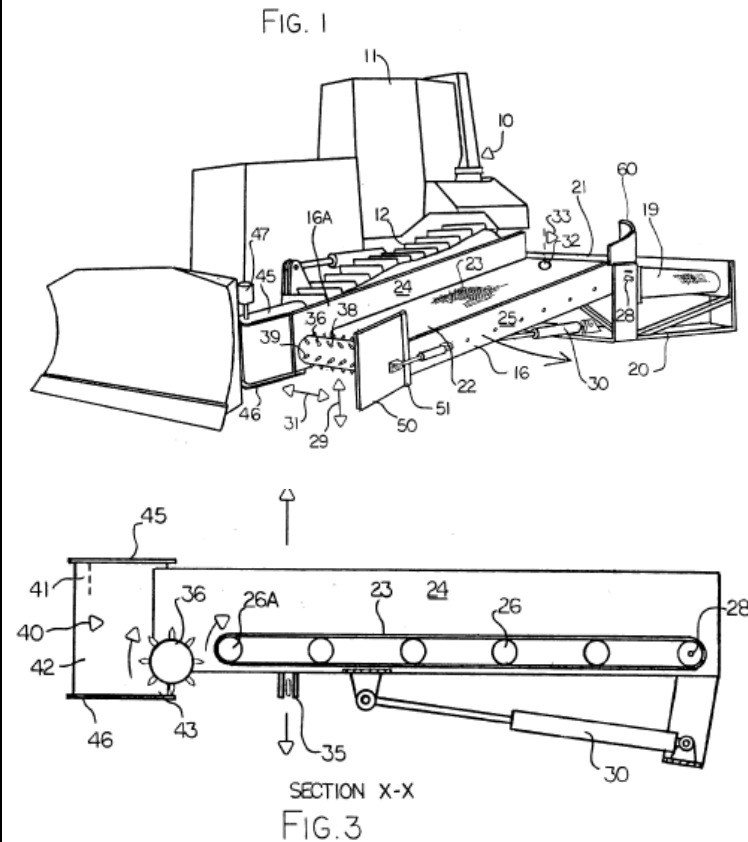


	<p>SECTION X-X FIG. 3</p>
<p>an extendible mast connected between the frame and the chassis to drive the frame about the pivotal connection</p>	<p>“The side wall 30 includes mounting lugs 35 and 36 for receiving support elements of a coupling 24 which connects the side of the vehicle to the sidewall 30. The coupling element 24 includes a link which allows the frame to pivot inwardly and outwardly about a horizontal axis parallel to the direction 13 so that the picking section can pivot outwardly and upwardly or outwardly and downwardly to accommodate changes in ground contour. In addition to the angle of the bottom skid 34 about a horizontal pivot axis transverse to the direction 13 can be changed by actuating the four point hitch connection 23 and/or by lifting the linkage 24.” McLeod/Pisony, p. 14, ll. 17-25.</p>



“In U.S. Pat. No. 5,934,861 issued Aug. 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2.241.682 published 26th Feb. 1999, a first proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisomy, p. 2, ll. 10-16. “The conveyor table **16** is mounted for pivotal movement about a horizontal pivot shaft **28** defining a pivot access adjacent the feed end **17a** for upward and downward vertical movement **29** of the forward end **27** of the conveyor table. Actuation of the vertical movement **29** is effected by a hydraulic drive cylinder **30** connected

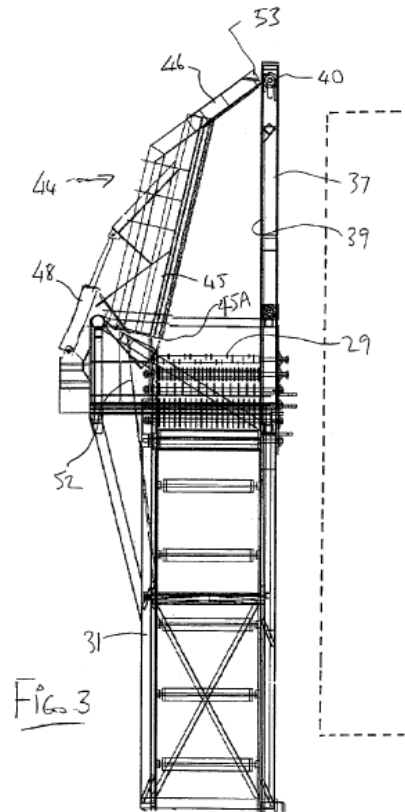
between the frame **20** and the underside of the conveyer table.” ‘861 patent, 2:66-3:5; “means mounting the conveyer table for movement of the forward end vertically up and down for adjustment of the height of the forward end.” ‘861 patent, 4:38-40.



and a receiving bin and a conveyor carried on the frame,

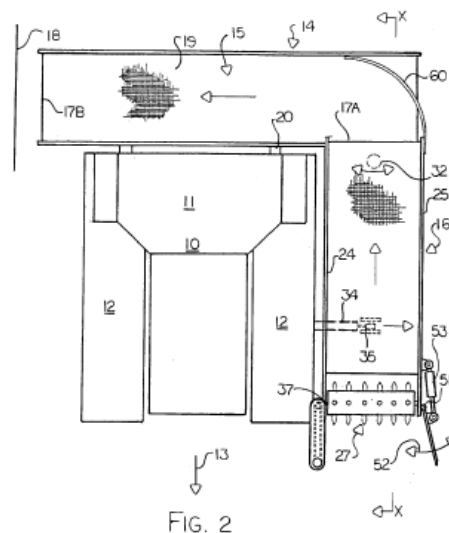
“The conveyor **15** includes a conveyer belt having a forward end **26** and a rear end **27** and is mounted on a plurality of support rollers **28** so that an upper run of the belt carries the pieces rearwardly and upwardly from the forward end **26** into the unscrambling hopper **18** at the rear end **27**.” McLeod/Pisomy, p. 13, ll. 8-11. “In

front of the conveyer belt is provided a plurality of picking rollers **28** arranged in a row in front of the front roller of the conveyer. ... The front picking rollers therefore act to lift the pieces off the ground or in some cases out of embedded position within the ground by the spikes of the disc engaging in the pieces and lifting them upwardly onto the top of the rollers for movement rearwardly onto the conveyor.” McLeod/Pisony, p. 13, l. 12-p. 14, l. 9.



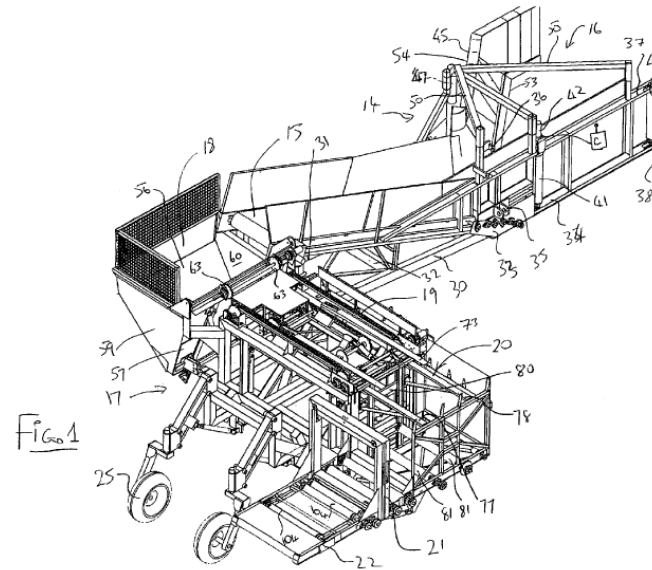
“In U.S. Pat. No. 5,934,861 issued Aug. 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2.241.682 published 26th Feb. 1999, a first proposal was made for a machine which picks up the pieces and conveys them

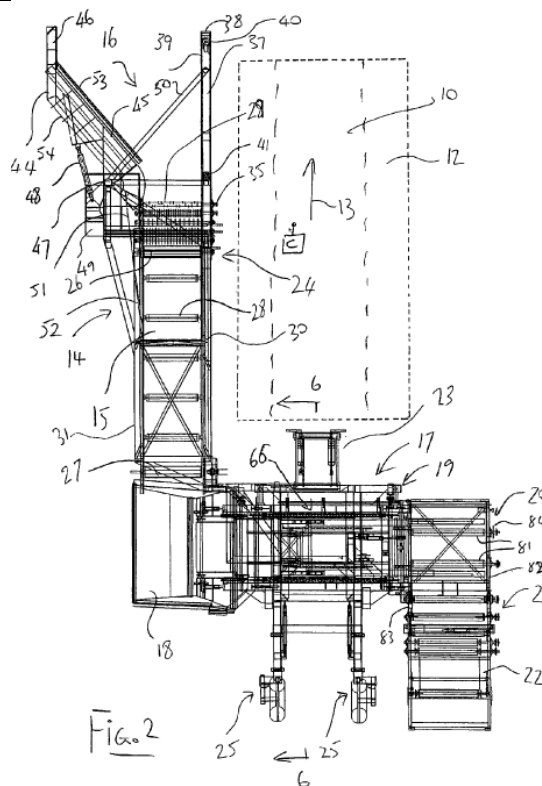
to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisony, p. 2, ll. 10-16. “The vehicle carries a picking and conveying system generally indicated at **14** including a main conveyor **15** and a conveyor table **16** feeding the main conveyor **15**. The main conveyor is mounted behind cab **11** of the vehicle from the feed end **16a** of the conveyor to a discharge end **17** of conveyor ...” ‘861 patent, 2:48-53. “The conveyor table includes a conveyor section **22** having a side belt **23** ...” ‘861 patent, 2:58-60.



the conveyor positioned between the receiving bin and the stacking assembly and being operable to move lumber from the receiving bin to the stacking assembly

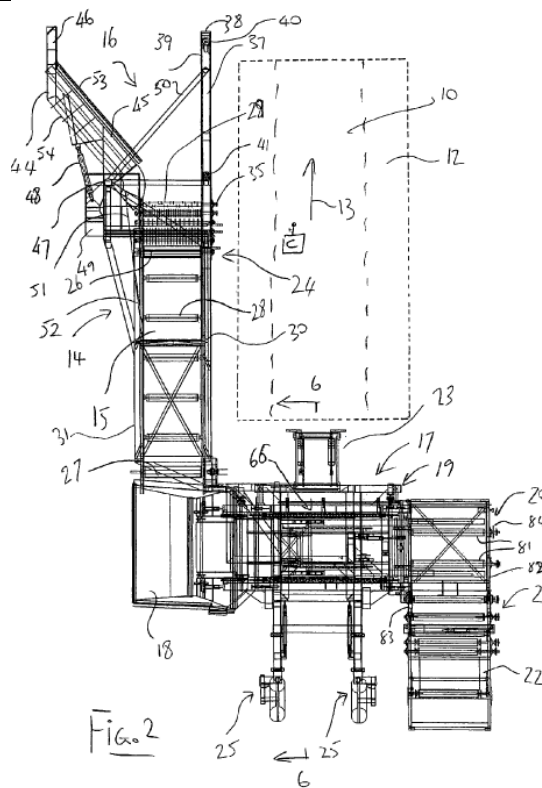
“The conveyor **15** includes a conveyor belt having a forward end **26** and a rear end **27** and is mounted on a plurality of support rollers **28** so that an upper run of the belt carries the pieces rearwardly and upwardly from the forward end **26** into the unscrambling hopper **18** at the rear end **27**.” McLeod/Pisony, p. 13, ll. 8-11





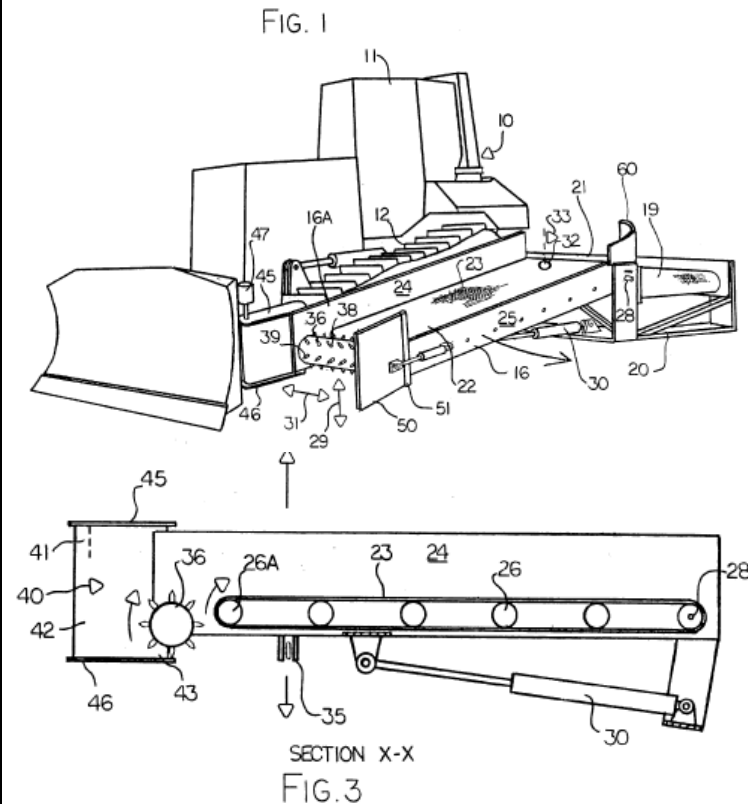
and the mast being operable to drive adjustment of the angle of the frame relative to the chassis to select the approach angle for the conveyer relative to the stacking assembly.

“The side wall **30** includes mounting lugs **35** and **36** for receiving support elements of a coupling **24** which connects the side of the vehicle to the sidewall **30**. The coupling element **24** includes a link which allows the frame to pivot inwardly and outwardly about a horizontal axis parallel to the direction **13** so that the picking section can pivot outwardly and upwardly or outwardly and downwardly to accommodate changes in ground contour. In addition to the angle of the bottom skid **34** about a horizontal pivot axis transverse to the direction **13** can be changed by actuating the four point hitch connection **23** and/or by lifting the linkage **24**.”
 ‘McLeod/Pisomy, p. 14ll. 17-25



“In U.S. Pat. No. 5,934,861 issued Aug. 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2.241.682 published 26th Feb. 1999, a first proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisomy, p. 2, ll. 10-16. “The conveyor table **16** is mounted for pivotal movement about a horizontal pivot shaft **28** defining a pivot access adjacent the feed end **17a** for upward and downward vertical movement **29** of the forward end **27** of the conveyor table. Actuation of the vertical movement **29** is effected by a hydraulic drive cylinder **30** connected

between the frame **20** and the underside of the conveyer table.” ‘861 patent, 2:66-3:5; “means mounting the conveyer table for movement of the forward end vertically up and down for adjustment of the height of the forward end.” ‘861 patent, 4:38-40.

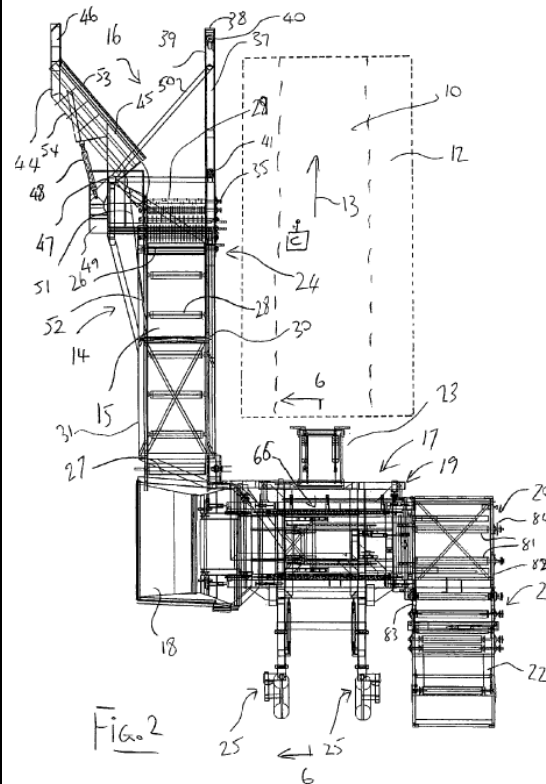


Claim 2

The apparatus of claim 1 wherein the mast drives the frame adjacent the receiving bin to select a spacing between the frame and the chassis.

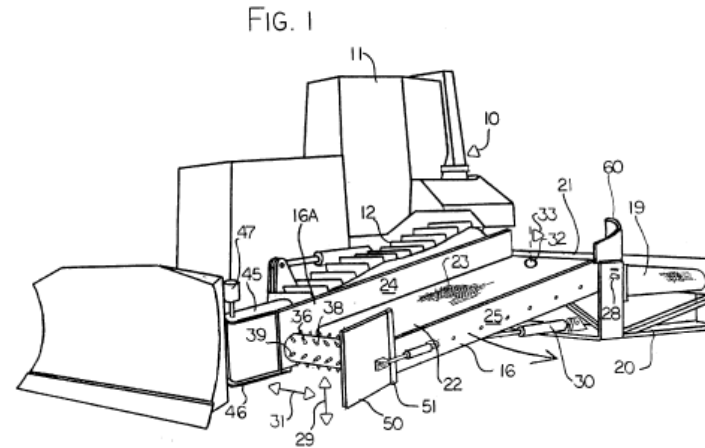
“The side wall **30** includes mounting lugs **35** and **36** for receiving support elements of a coupling **24** which connects the side of the vehicle to the sidewall **30**. The coupling element **24** includes a link which allows the frame to pivot inwardly and outwardly about a horizontal axis parallel to the direction **13** so that the picking

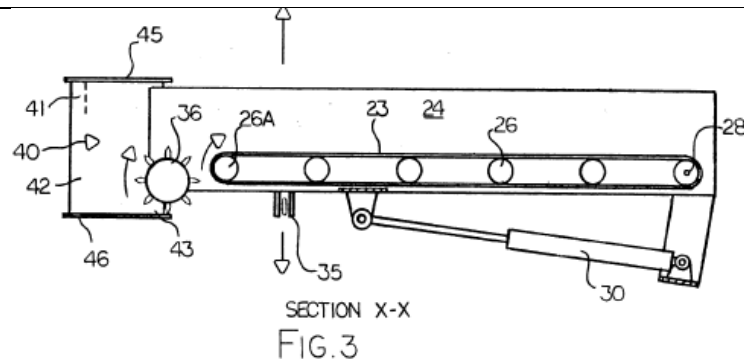
section can pivot outwardly and upwardly or outwardly and downwardly to accommodate changes in ground contour. In addition to the angle of the bottom skid **34** about a horizontal pivot axis transverse to the direction **13** can be changed by actuating the four point hitch connection **23** and/or by lifting the linkage **24**.” McLeod/Pisony, p. 14, 17-25.



“In U.S. Pat. No. 5,934,861 issued Aug. 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2.241.682 published 26th Feb. 1999, a first proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein and which form the basis of the

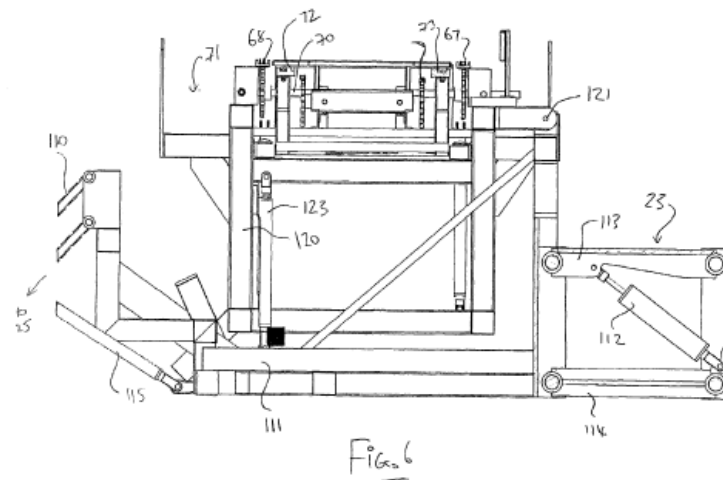
invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisony, p. 2, ll. 10-16. “The conveyer table **16** is mounted for pivotal movement about a horizontal pivot shaft **28** defining a pivot access adjacent the feed end **17a** for upward and downward vertical movement **29** of the forward end **27** of the conveyer table. Actuation of the vertical movement **29** is effected by a hydraulic drive cylinder **30** connected between the frame **20** and the underside of the conveyer table.” ‘861 patent, 2:66-3:5; “means mounting the conveyer table for movement of the forward end vertically up and down for adjustment of the height of the forward end.” ‘861 patent, 4:38-40.



**Claim 4**

The apparatus of claim 1 wherein the stacking assembly further includes a pivoting arrangement for tilting the stacking assembly relative to the chassis to provide for substantial leveling of the stacking assembly when operating on uneven ground surfaces.

“[T]he stacking section included in the conveyor **66** and the stacking arms on the vertical conveyor of the stacking assembly is mounted on a subframe section **120** separate from the frame section **111** and pivotally connected to the frame section **111** on a pivot pin **121**. The height of the stacking section relative to the frame section **111** can be adjusted by a cylinder **123** under control of the operator standing on the frame **71**. Thus the stacking section can be maintained substantially horizontal relative to a front to rear direction by pivoting action about the horizontal transverse pivot pin **121**.” McLeod/Pisony, p. 24, l-p. 25, l. 6.

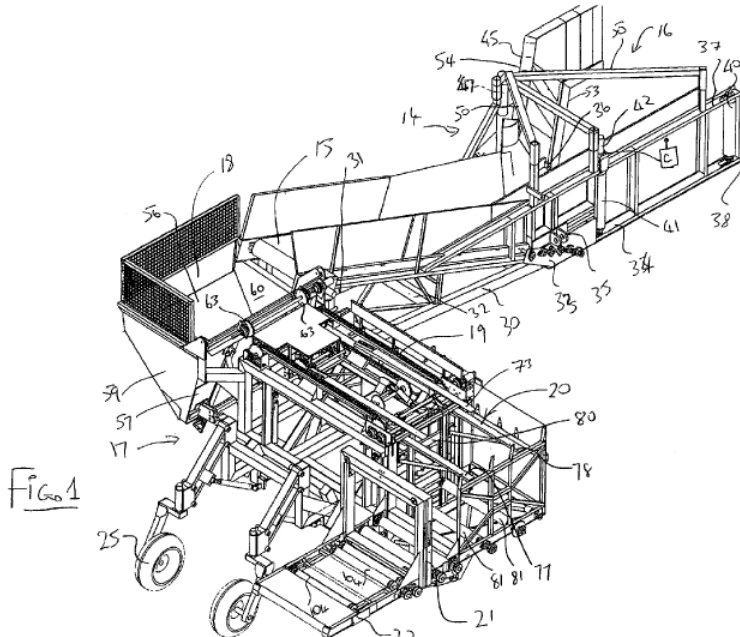


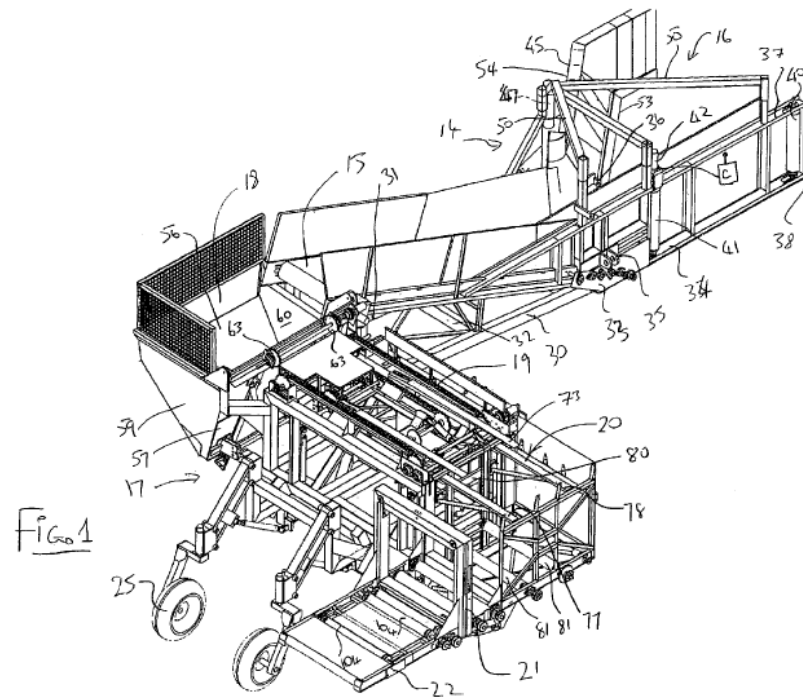
	<p>“The apparatus of claim 11 wherein the stacking assembly and the bundling assembly are mounted on a sub-frame portion of the frame which is arranged for pivotal movement relative to the frame and relative to the conveyor about a horizontal axis transverse to the direction of the movement of the vehicle to maintain the stacking assembly and bundling assembly substantially level as the vehicle moves.” McLeod/Pisony, p. 31, ll. 11-16.</p>
Claim 6	
<p>The apparatus of claim 1 wherein the mast includes a hydraulic cylinder drivable to telescope to various lengths.</p>	<p>“In U.S. Pat. No. 5,934,861 issued Aug. 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2.241.682 published 26th Feb. 1999, a first proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisony, p. 2, ll. 10-16. “The conveyer table 16 is mounted for pivotal movement about a horizontal pivot shaft 28 defining a pivot axis adjacent the feed end 17a for upward and downward vertical movement 29 of the forward end 27 of the conveyer table. Actuation of the vertical movement 29 is effected by a hydraulic drive cylinder 30 connected between the frame 20 and the underside of the conveyer table.” ‘861 patent, 2:66-3:5; “means mounting the conveyer table for movement of the forward end vertically up and down for adjustment of the height of the forward end.” ‘861 patent, 4:38-40;</p>

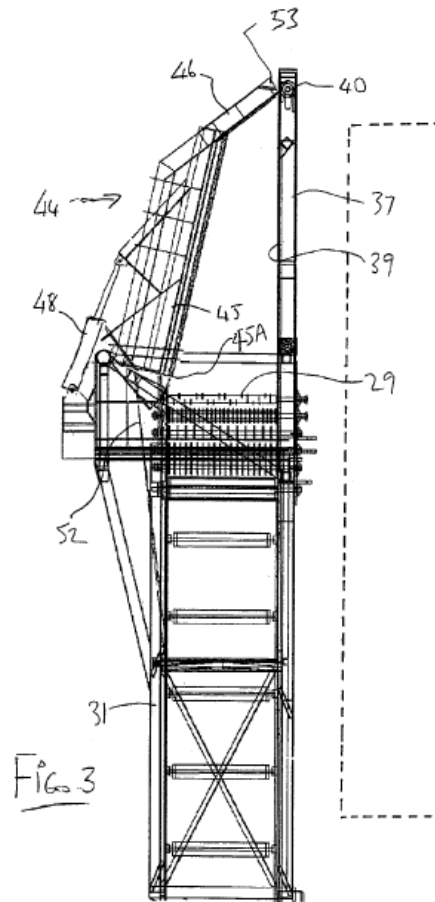
EXHIBIT B

Invalidity Contentions Claim Chart for U.S. Patent No. 7,591,629
Claims 1, 2, 4 and 6 in view of McLeod/Pisony and McLeod under 35 U.S.C. § 103
(to the extent that McLeod/Pisony is not considered a single reference)

Claim 1	McLeod/Pisony and McLeod
An apparatus for picking up, stacking and bundling lumber, comprising:	The preamble is not a limitation. However, to the extent it could be construed to be a limitation, the '202 patent discloses an apparatus for picking up, stacking and bundling lumber": "[a]n apparatus for picking, conveying, stacking and bundling lumber pieces from the grounds ..." McLeod/Pisony, Abstract (57)
(a) a chassis,	"The elements provided by the picking and conveyer assembly 14 , the stacking assembly 17 and the bundling assembly 21 are all mounted on a frame for common movement with the vehicle 10 in the working direction 13 . The frame carrying these elements is attached to the vehicle by a four point hitch 23 at the rear of the vehicle and by coupling assembly generally indicated at 24 at the side of the vehicle and inwardly of the picking and conveyer assembly 14 . McLeod/Pisony, p. 11, l. 23-p. 12, l. 3.

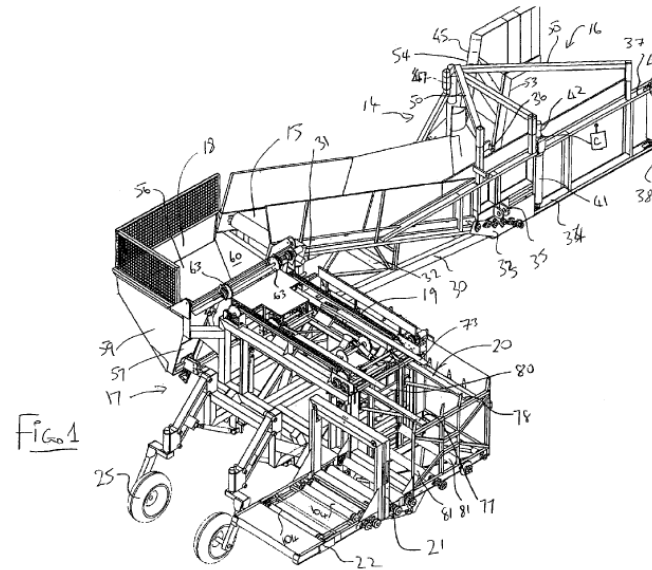
	
(b) a grapple carried with the chassis,	<p>“Such an arrangement can also be used with a picking assembly in the form of a mechanically operated grapple which lifts the pieces from a large pile of the pieces for formation into stacks which are bundled and discharged. Again therefore this device in combination with a grapple type picking assembly is portable on a suitable trailer or frame carried by a vehicle so that it can be moved to a pile or collection of the piecing for stacking.” McLeod/Pisomy, p. 13, ll. 2-7.</p>
(c) a conveyor assembly supported on the chassis,	<p>“The apparatus further includes a picking and conveyer assembly 14 having a main conveyer 15 attached to and arranged rearwardly of a picker 16.” ‘202 patent, 4:45-47. The elements provided by the picking and conveyer assembly 14, the stacking assembly 17 and the bundling assembly 21 are all mounted on a frame for common movement with the vehicle 10 in the working direction 13. McLeod/Pisomy, p. 11, ll. 18-25.</p>

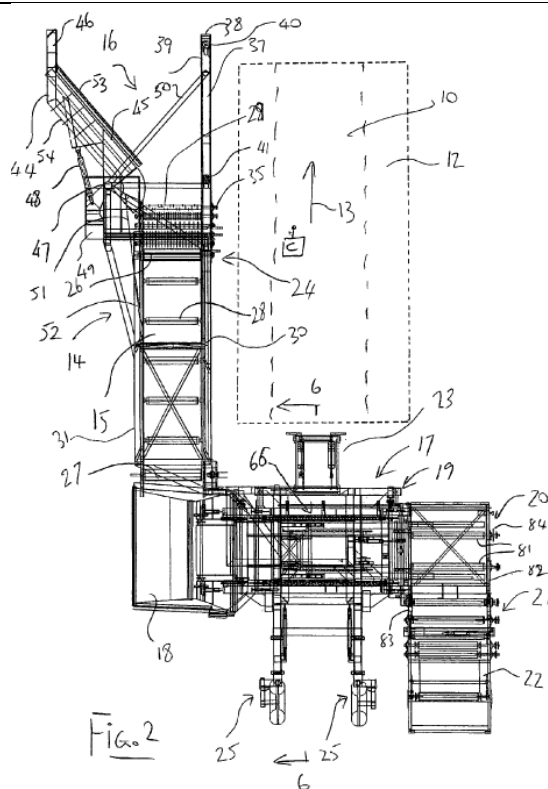




(d)) a stacking assembly operatively connected adjacent the conveyor assembly, the stacking assembly including an unscrambling hopper, a row conveyor, a stacking bin and a bundling assembly, and,

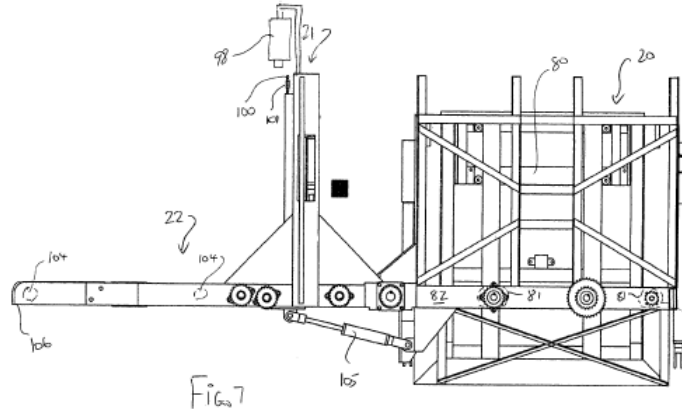
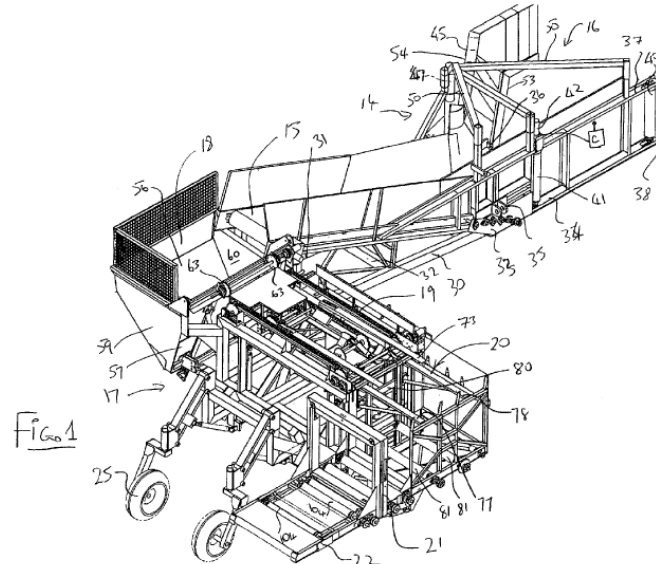
“At the rear of the conveyer **15** is provided a stacking assembly **14** generally indicated at **17** including an unscrambling hopper **18**, a row conveyer **19** and a stacking assembly **20**. The apparatus further including a bundling assembly **21** including a discharge ramp **22**.” ‘202 patent, 4:47-52. The elements provided by the picking and conveyer assembly **14**, the stacking assembly **17** and the bundling assembly **21** are all mounted on a frame for common movement with the vehicle **10** in the working direction **13**. McLeod/Pisony, p. 11, ll. 19-25.





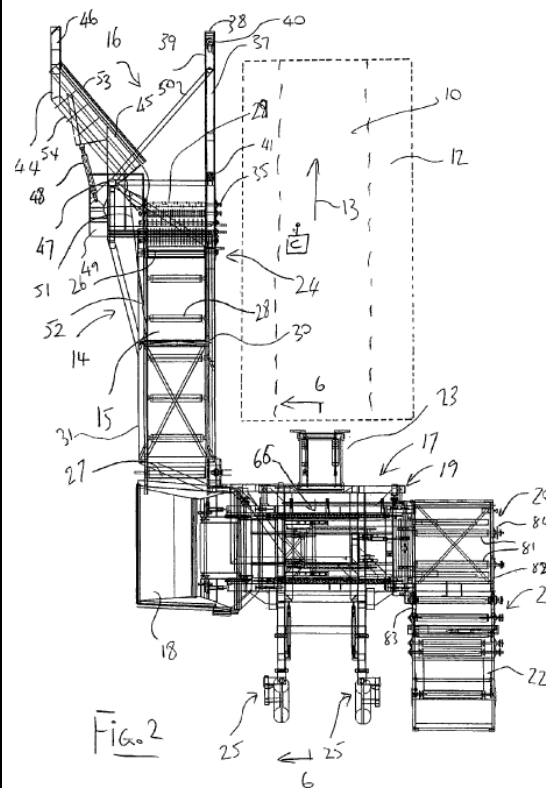
(e) a discharge platform operatively connected adjacent the bundling assembly,

The apparatus further including a bundling assembly **21** including a discharge ramp **22.**" McLeod/Pisomy, p. 11, ll. 22-23.

	 <p>Fig. 7</p>
<p>(f) wherein the conveyor assembly includes a frame,</p>	<p>“The conveyor is mounted on a frame section of the main frame having a first side 30 and a second side 31. McLeod/Pisony, p. 14, ll. 10-12.</p>  <p>Fig. 4</p>
<p>a pivotal connection for the frame to permit angular adjustment of the frame</p>	<p>“The side wall 30 includes mounting lugs 35 and 36 for receiving support elements of a coupling 24 which connects the side of the vehicle to the sidewall 30.</p>

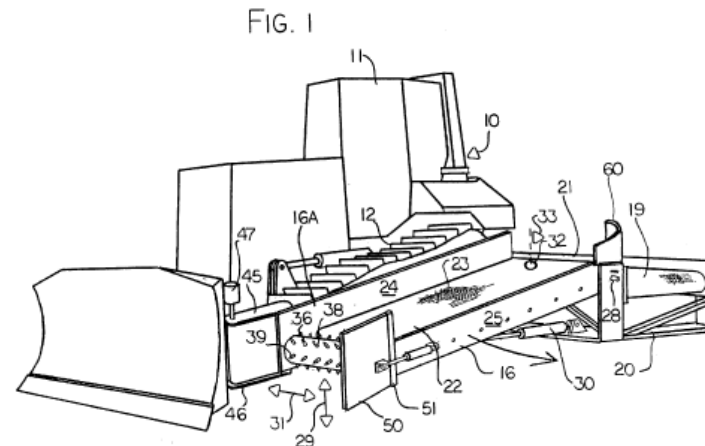
relative to the chassis,

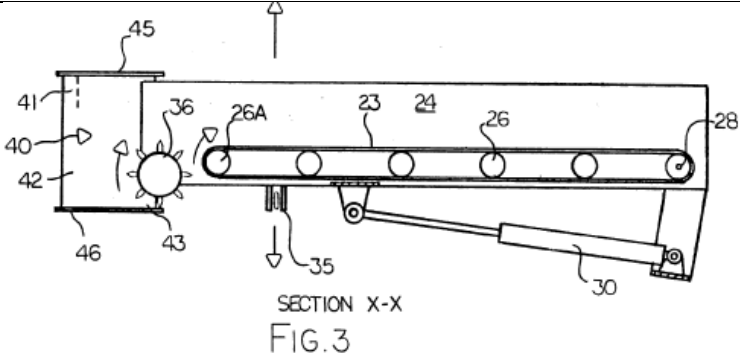
The coupling element **24** includes a link which allows the frame to pivot inwardly and outwardly about a horizontal axis parallel to the direction **13** so that the picking section can pivot outwardly and upwardly or outwardly and downwardly to accommodate changes in ground contour. In addition to the angle of the bottom skid **34** about a horizontal pivot axis transverse to the direction **13** can be changed by actuating the four point hitch connection **23** and/or by lifting the linkage **24**.”
McLeod/Pisomy, p. 14, ll. 19-25.

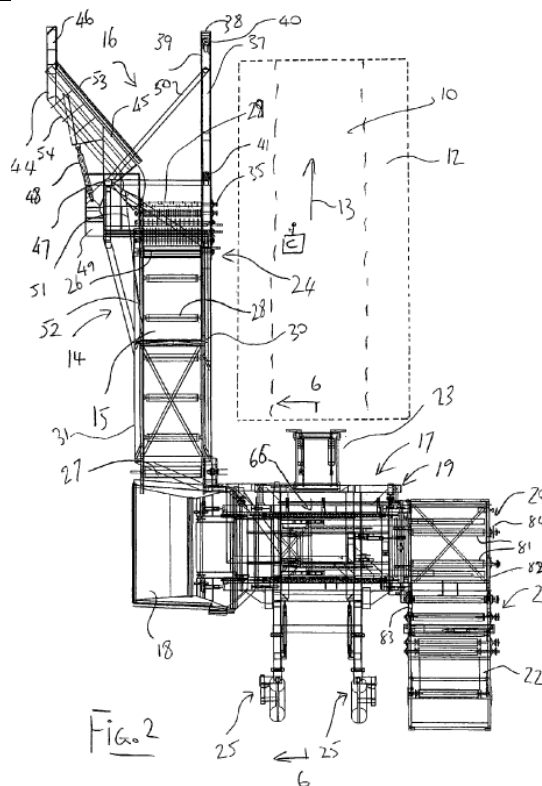


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them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisony, p. 2, ll. 10-16. “The conveyer table **16** is mounted for pivotal movement about a horizontal pivot shaft **28** defining a pivot access adjacent the feed end **17a** for upward and downward vertical movement **29** of the forward end **27** of the conveyer table. Actuation of the vertical movement **29** is effected by a hydraulic drive cylinder **30** connected between the frame **20** and the underside of the conveyer table.” ‘861 patent, 2:66-3:5; “means mounting the conveyor table for movement of the forward end vertically up and down for adjustment of the height of the forward end.” ‘861 patent, 4:38-40.

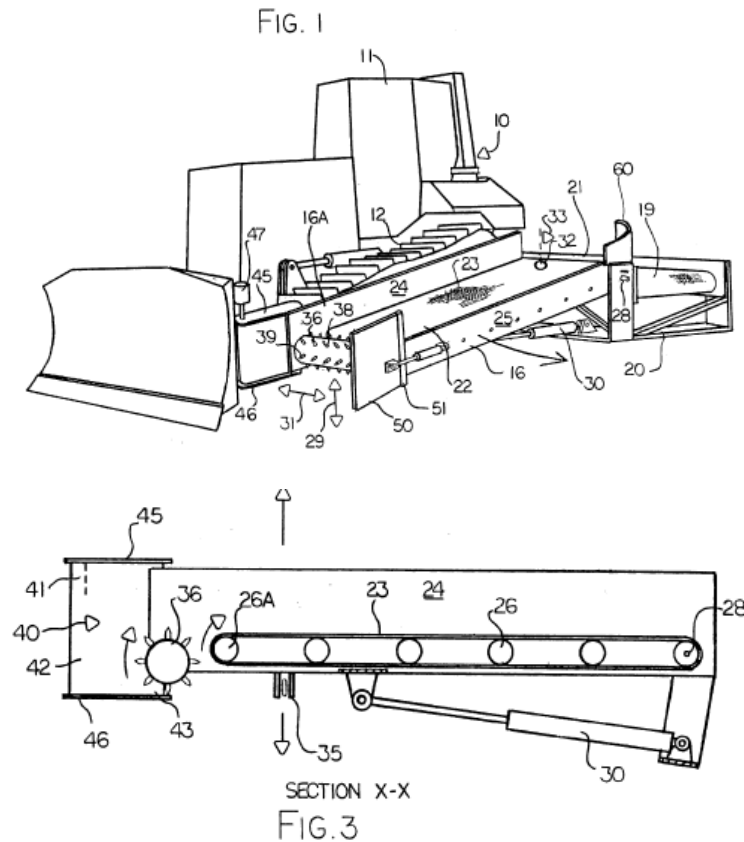


	 <p style="text-align: center;">SECTION X-X FIG. 3</p>
<p>an extendible mast connected between the frame and the chassis to drive the frame about the pivotal connection</p>	<p>“The side wall 30 includes mounting lugs 35 and 36 for receiving support elements of a coupling 24 which connects the side of the vehicle to the sidewall 30. The coupling element 24 includes a link which allows the frame to pivot inwardly and outwardly about a horizontal axis parallel to the direction 13 so that the picking section can pivot outwardly and upwardly or outwardly and downwardly to accommodate changes in ground contour. In addition to the angle of the bottom skid 34 about a horizontal pivot axis transverse to the direction 13 can be changed by actuating the four point hitch connection 23 and/or by lifting the linkage 24.” McLeod/Pisony, p. 14, ll. 17-25.</p>



“In U.S. Pat. No. 5,934,861 issued Aug. 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2.241.682 published 26th Feb. 1999, a first proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisony, p. 2, ll. 10-16. “The conveyor table **16** is mounted for pivotal movement about a horizontal pivot shaft **28** defining a pivot access adjacent the feed end **17a** for upward and downward vertical movement **29** of the forward end **27** of the conveyor table. Actuation of the vertical movement **29** is effected by a hydraulic drive cylinder **30** connected

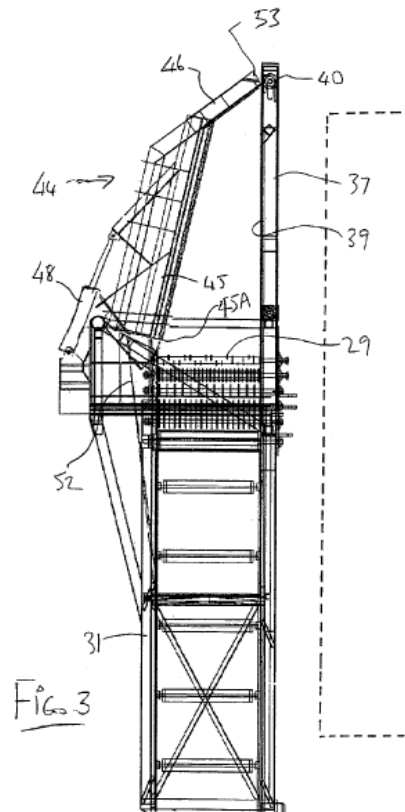
between the frame **20** and the underside of the conveyer table.” ‘861 patent, 2:66-3:5; “means mounting the conveyer table for movement of the forward end vertically up and down for adjustment of the height of the forward end.” ‘861 patent, 4:38-40.



and a receiving bin and a conveyor carried on the frame,

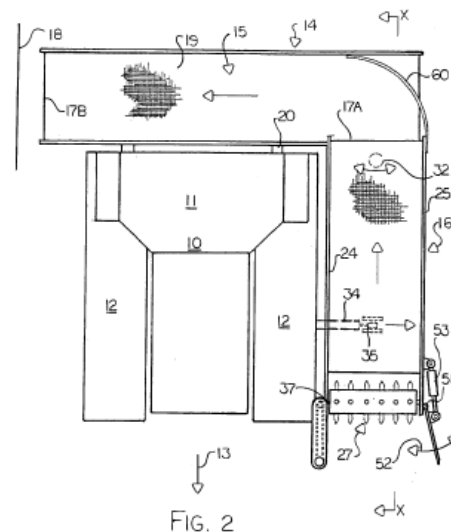
“The conveyor **15** includes a conveyor belt having a forward end **26** and a rear end **27** and is mounted on a plurality of support rollers **28** so that an upper run of the belt carries the pieces rearwardly and upwardly from the forward end **26** into the unscrambling hopper **18** at the rear end **27**.” McLeod/Pisony, p. 13, ll. 8-11. “In

front of the conveyer belt is provided a plurality of picking rollers **28** arranged in a row in front of the front roller of the conveyer. ... The front picking rollers therefore act to lift the pieces off the ground or in some cases out of embedded position within the ground by the spikes of the disc engaging in the pieces and lifting them upwardly onto the top of the rollers for movement rearwardly onto the conveyor.” McLeod/Pisony, p. 13, l. 12-p. 14, l. 9.



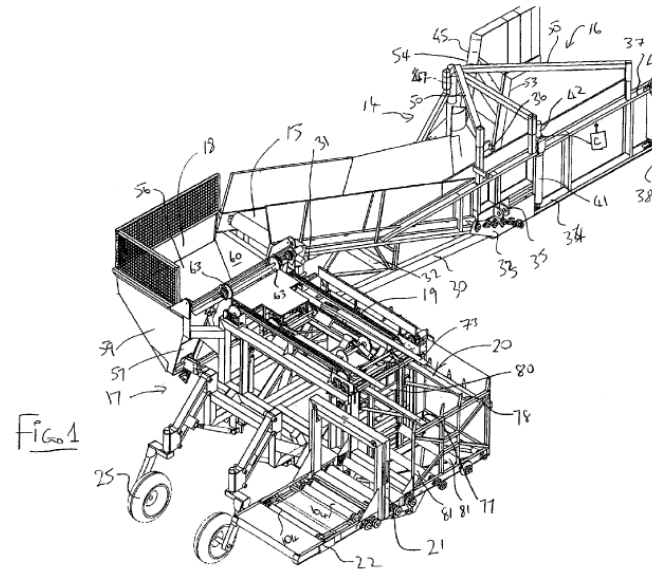
“In U.S. Pat. No. 5,934,861 issued Aug. 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2.241.682 published 26th Feb. 1999, a first proposal was made for a machine which picks up the pieces and conveys them

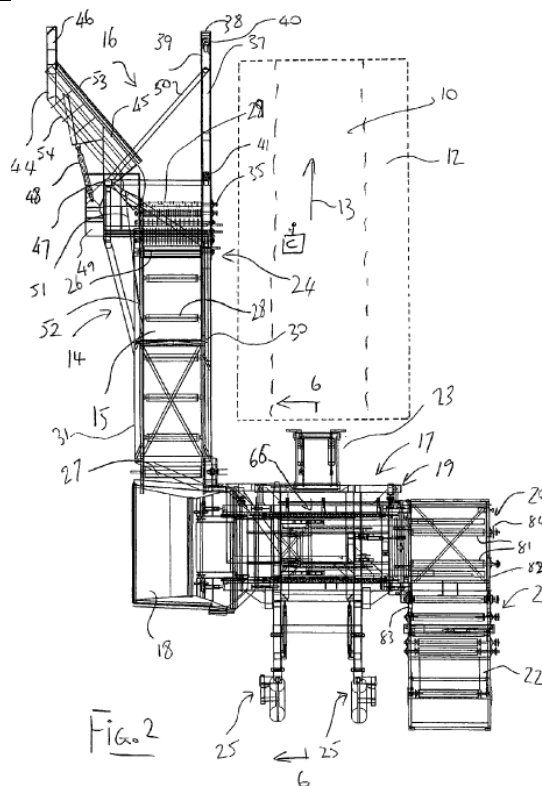
to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisony, p. 2, ll. 10-16. “The vehicle carries a picking and conveying system generally indicated at **14** including a main conveyor **15** and a conveyor table **16** feeding the main conveyor **15**. The main conveyor is mounted behind cab **11** of the vehicle from the feed end **16a** of the conveyor to a discharge end **17** of conveyor ...” ‘861 patent, 2:48-53. “The conveyor table includes a conveyor section **22** having a side belt **23** ...” ‘861 patent, 2:58-60.



the conveyor positioned between the receiving bin and the stacking assembly and being operable to move lumber from the receiving bin to the stacking assembly

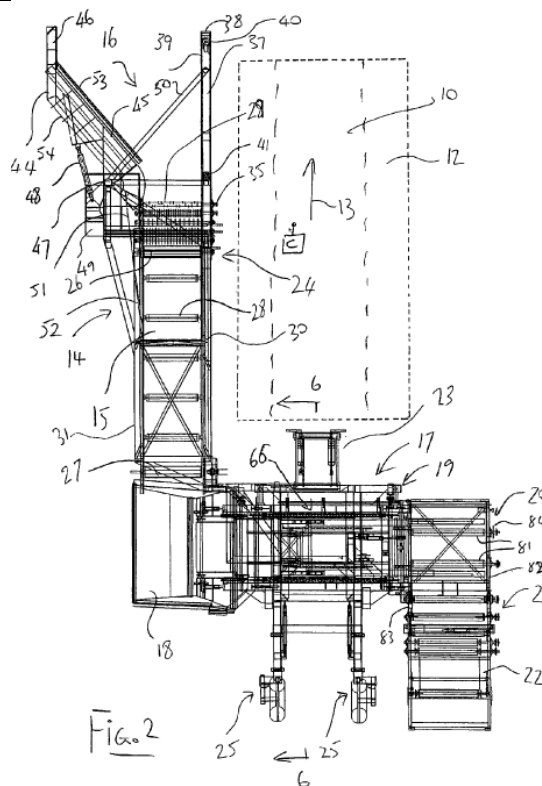
“The conveyor **15** includes a conveyor belt having a forward end **26** and a rear end **27** and is mounted on a plurality of support rollers **28** so that an upper run of the belt carries the pieces rearwardly and upwardly from the forward end **26** into the unscrambling hopper **18** at the rear end **27**.” McLeod/Pisony, p. 13, ll. 8-11





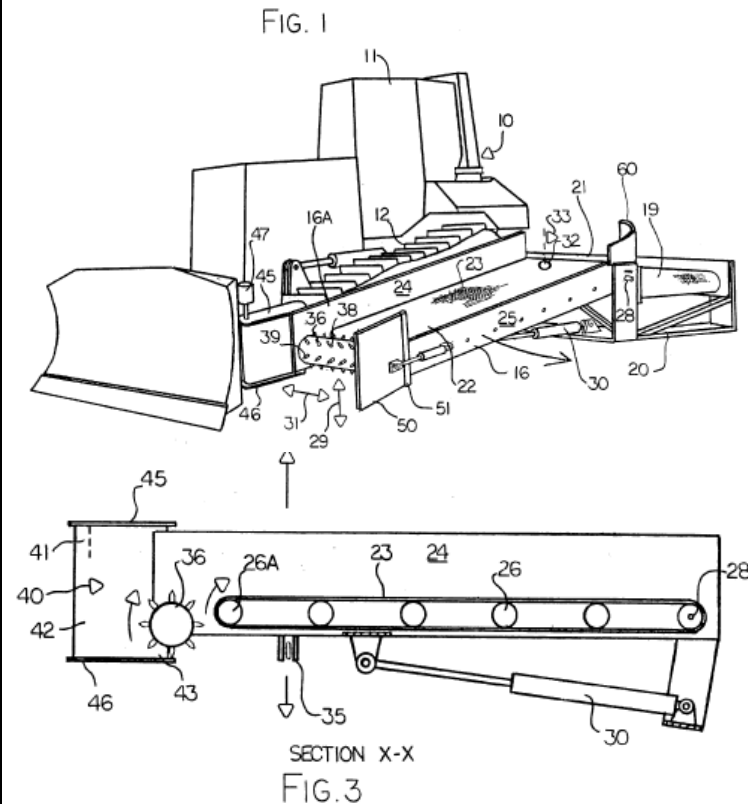
and the mast being operable to drive adjustment of the angle of the frame relative to the chassis to select the approach angle for the conveyer relative to the stacking assembly.

“The side wall **30** includes mounting lugs **35** and **36** for receiving support elements of a coupling **24** which connects the side of the vehicle to the sidewall **30**. The coupling element **24** includes a link which allows the frame to pivot inwardly and outwardly about a horizontal axis parallel to the direction **13** so that the picking section can pivot outwardly and upwardly or outwardly and downwardly to accommodate changes in ground contour. In addition to the angle of the bottom skid **34** about a horizontal pivot axis transverse to the direction **13** can be changed by actuating the four point hitch connection **23** and/or by lifting the linkage **24**.”
 ‘McLeod/Pisomy, p. 14ll. 17-25



“In U.S. Pat. No. 5,934,861 issued Aug. 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2.241.682 published 26th Feb. 1999, a first proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisomy, p. 2, ll. 10-16. “The conveyor table **16** is mounted for pivotal movement about a horizontal pivot shaft **28** defining a pivot access adjacent the feed end **17a** for upward and downward vertical movement **29** of the forward end **27** of the conveyor table. Actuation of the vertical movement **29** is effected by a hydraulic drive cylinder **30** connected

between the frame **20** and the underside of the conveyer table.” ‘861 patent, 2:66-3:5; “means mounting the conveyer table for movement of the forward end vertically up and down for adjustment of the height of the forward end.” ‘861 patent, 4:38-40.

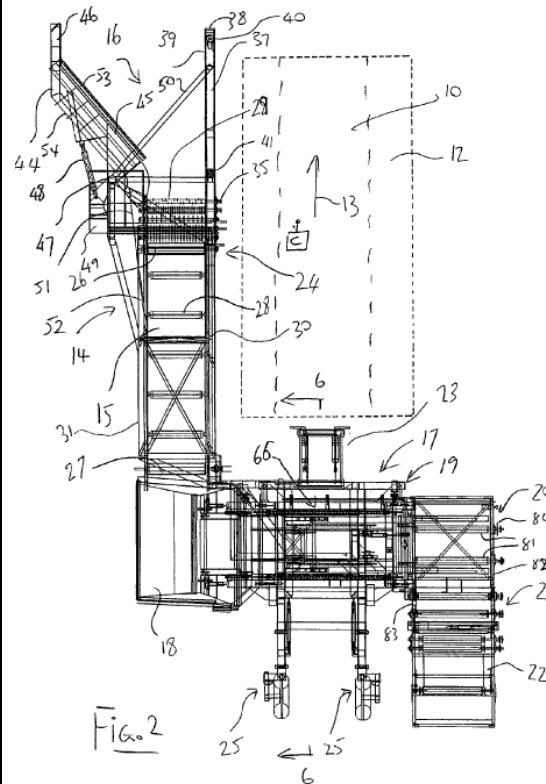


Claim 2

The apparatus of claim 1 wherein the mast drives the frame adjacent the receiving bin to select a spacing between the frame and the chassis.

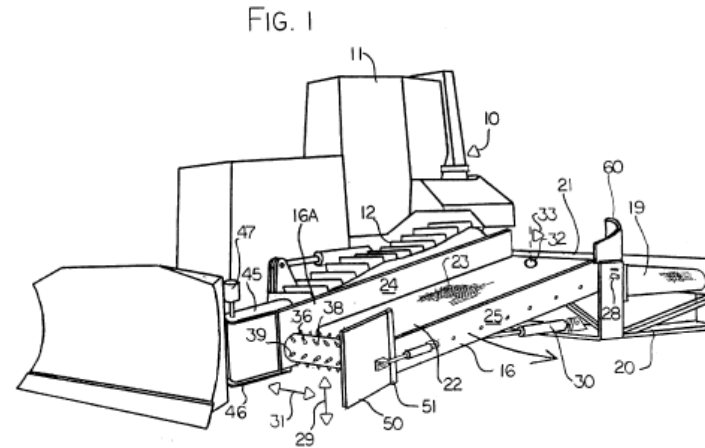
“The side wall **30** includes mounting lugs **35** and **36** for receiving support elements of a coupling **24** which connects the side of the vehicle to the sidewall **30**. The coupling element **24** includes a link which allows the frame to pivot inwardly and outwardly about a horizontal axis parallel to the direction **13** so that the picking

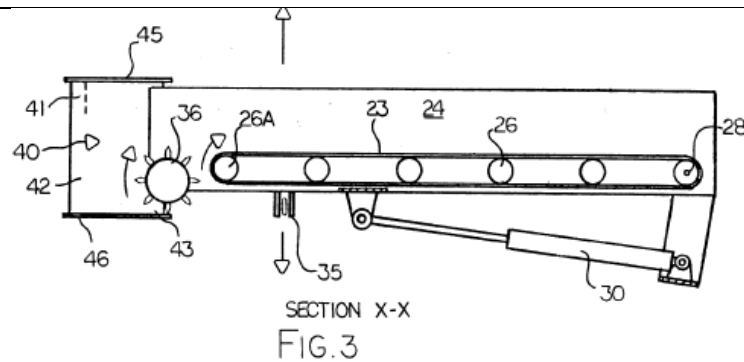
section can pivot outwardly and upwardly or outwardly and downwardly to accommodate changes in ground contour. In addition to the angle of the bottom skid **34** about a horizontal pivot axis transverse to the direction **13** can be changed by actuating the four point hitch connection **23** and/or by lifting the linkage **24**.” McLeod/Pisomy, p. 14, 17-25.



“In U.S. Pat. No. 5,934,861 issued Aug. 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2.241.682 published 26th Feb. 1999, a first proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein and which form the basis of the

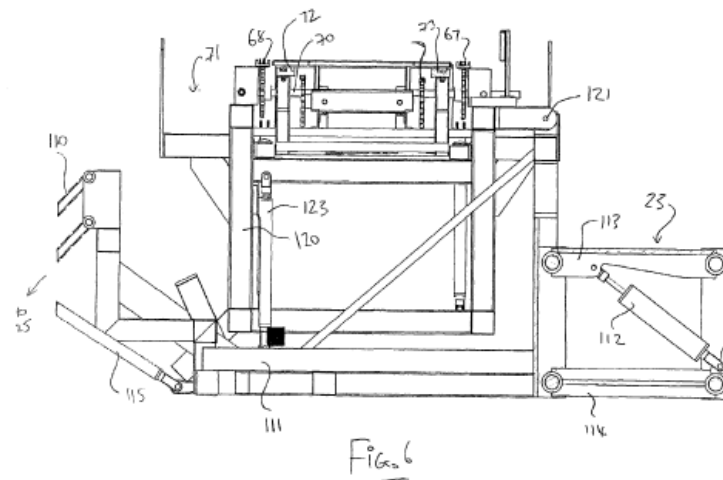
invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisony, p. 2, ll. 10-16. “The conveyer table **16** is mounted for pivotal movement about a horizontal pivot shaft **28** defining a pivot access adjacent the feed end **17a** for upward and downward vertical movement **29** of the forward end **27** of the conveyer table. Actuation of the vertical movement **29** is effected by a hydraulic drive cylinder **30** connected between the frame **20** and the underside of the conveyer table.” ‘861 patent, 2:66-3:5; “means mounting the conveyer table for movement of the forward end vertically up and down for adjustment of the height of the forward end.” ‘861 patent, 4:38-40.



**Claim 4**

The apparatus of claim 1 wherein the stacking assembly further includes a pivoting arrangement for tilting the stacking assembly relative to the chassis to provide for substantial leveling of the stacking assembly when operating on uneven ground surfaces.

“[T]he stacking section included in the conveyor **66** and the stacking arms on the vertical conveyor of the stacking assembly is mounted on a subframe section **120** separate from the frame section **111** and pivotally connected to the frame section **111** on a pivot pin **121**. The height of the stacking section relative to the frame section **111** can be adjusted by a cylinder **123** under control of the operator standing on the frame **71**. Thus the stacking section can be maintained substantially horizontal relative to a front to rear direction by pivoting action about the horizontal transverse pivot pin **121**.” McLeod/Pisony, p. 24, l-p. 25, l. 6.



	<p>“The apparatus of claim 11 wherein the stacking assembly and the bundling assembly are mounted on a sub-frame portion of the frame which is arranged for pivotal movement relative to the frame and relative to the conveyor about a horizontal axis transverse to the direction of the movement of the vehicle to maintain the stacking assembly and bundling assembly substantially level as the vehicle moves.” McLeod/Pisony, p. 31, ll. 11-16.</p>
Claim 6	
<p>The apparatus of claim 1 wherein the mast includes a hydraulic cylinder drivable to telescope to various lengths.</p>	<p>“In U.S. Pat. No. 5,934,861 issued Aug. 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2.241.682 published 26th Feb. 1999, a first proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisony, p. 2, ll. 10-16. “The conveyer table 16 is mounted for pivotal movement about a horizontal pivot shaft 28 defining a pivot access adjacent the feed end 17a for upward and downward vertical movement 29 of the forward end 27 of the conveyer table. Actuation of the vertical movement 29 is effected by a hydraulic drive cylinder 30 connected between the frame 20 and the underside of the conveyer table.” ‘861 patent, 2:66-3:5; “means mounting the conveyer table for movement of the forward end vertically up and down for adjustment of the height of the forward end.” ‘861 patent, 4:38-40;</p>

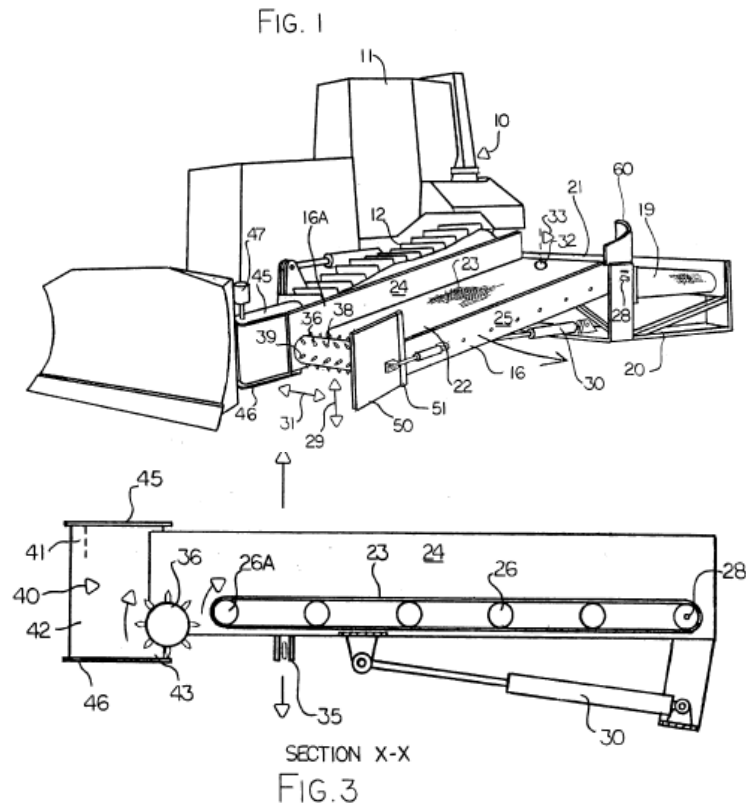



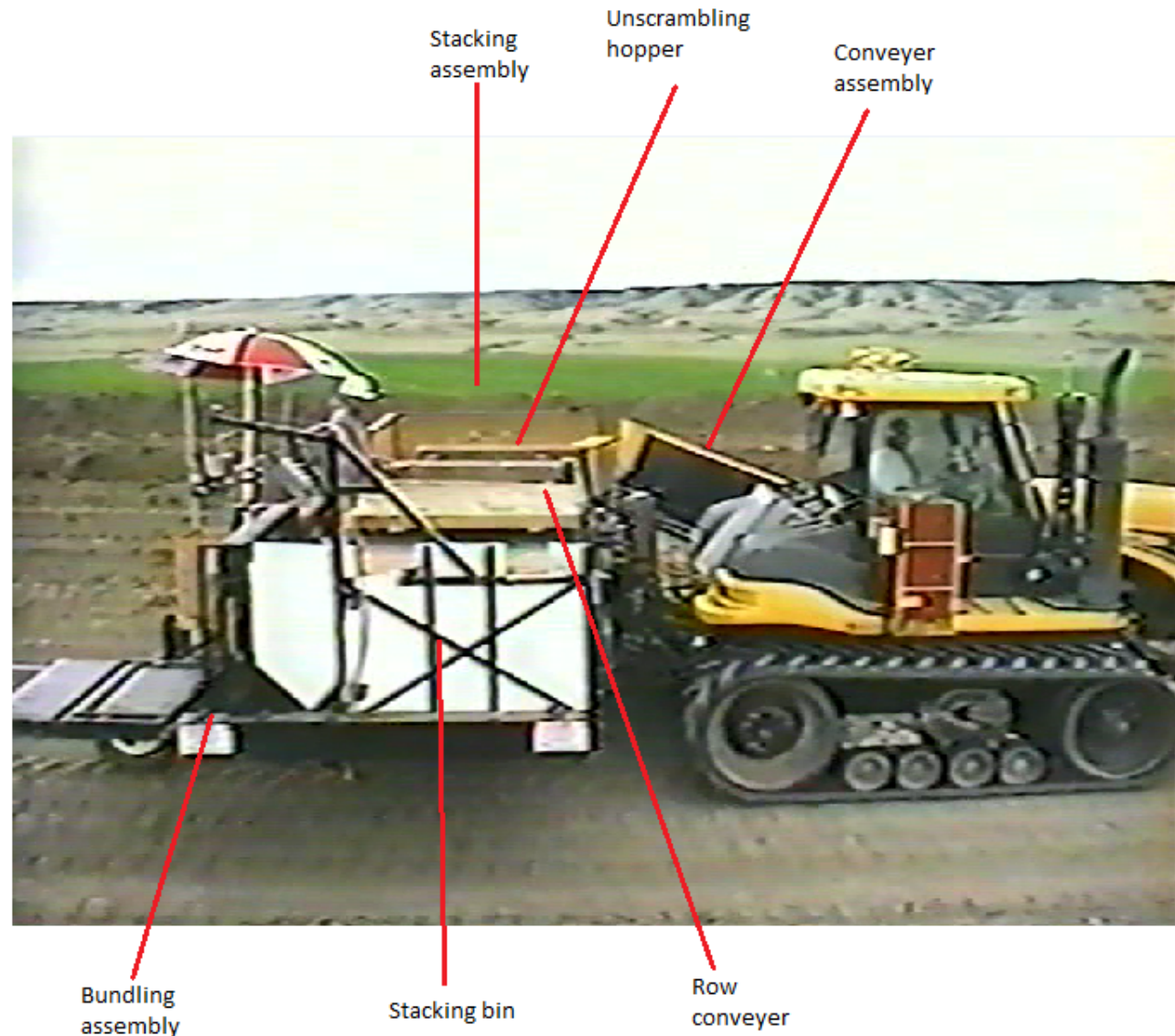
EXHIBIT C

Invalidity Contentions Claim Chart for U.S. Patent No. 7,591,629
Claims 1, 2, 4 and 6 in view of the 2000 Skid Hustler machine and McLeod/Pisony under 35 U.S.C. § 103

Claim 1	2000 Skid Hustler Machine in view of McLeod/Pisony
An apparatus for picking up, stacking and bundling lumber, comprising:	The preamble is not a limitation. However, to the extent it could be construed to be a limitation, the 2000 Skid Hustler machine is an apparatus for picking up, stacking and bundling lumber. <i>See generally</i> CCI0002058.
(a) a chassis,	<p>The 2000 machine includes a chassis:</p>  <p style="text-align: right;">Chassis</p> <p>CCI0002058 (image from video taken during Marine Pipeline job in June 2000)</p>
(b) a grapple	“Such an arrangement can also be used with a picking assembly in the form of a mechanically operated

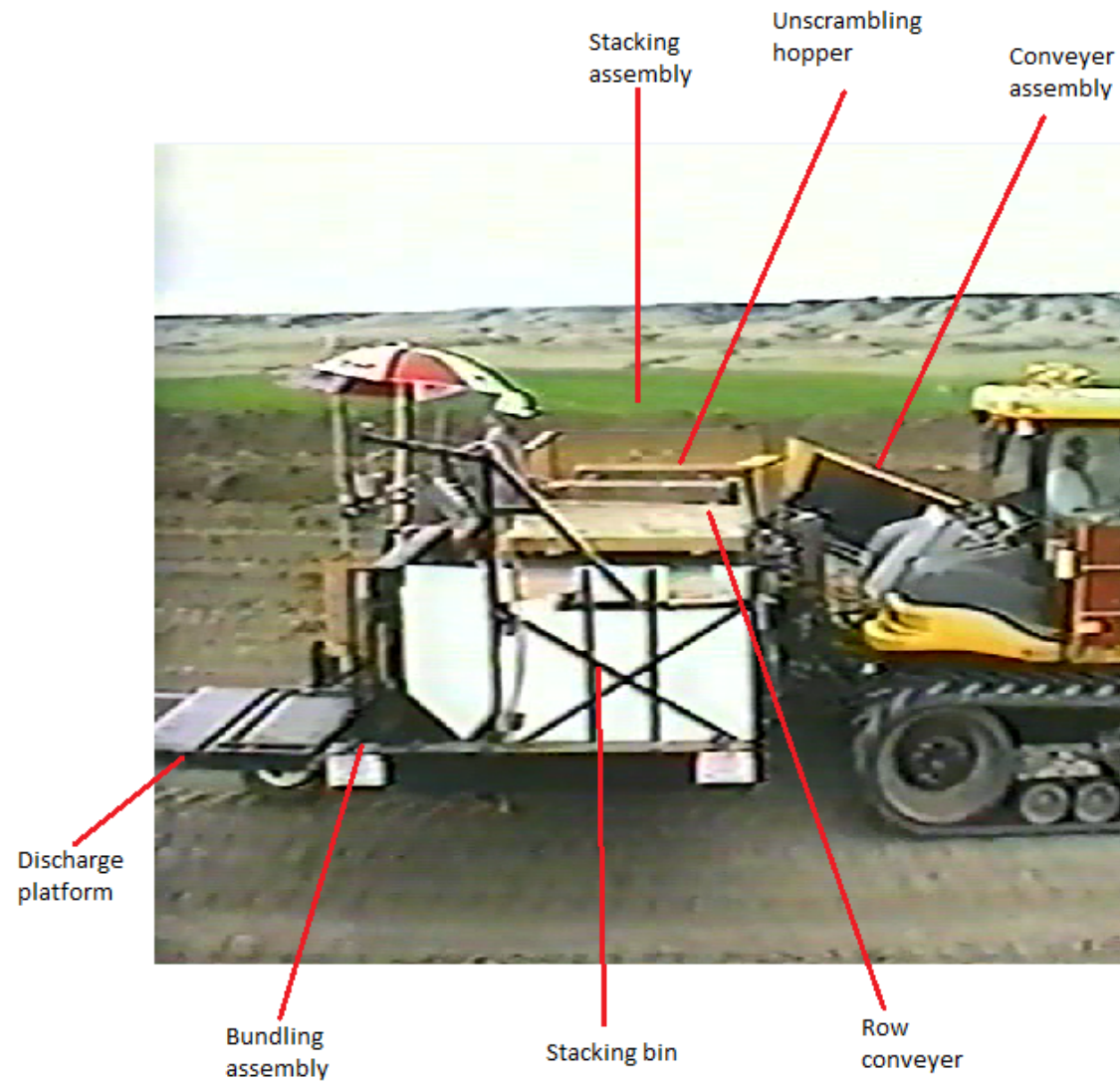
carried with the chassis,	grapple which lifts the pieces from a large pile of the pieces for formation into stacks which are bundled and discharged. Again therefore this device in combination with a grapple type picking assembly is portable on a suitable trailer or frame carried by a vehicle so that it can be moved to a pile or collection of the piecing for stacking.” ‘202, 5:24-28.
(c) a conveyor assembly supported on the chassis,	<p>The conveyor frame is supported on the chassis:</p>  <p>CCI0002058 (image from video taken during Marine Pipeline job in June 2000)</p>

(d)) a stacking assembly operatively connected adjacent the conveyor assembly, the stacking assembly including an unscrambling hopper, a row conveyor, a stacking bin and a bundling assembly, and,



CCI0002058 (image from video taken during Marine Pipeline job in June 2000)

(e) a discharge platform operatively connected adjacent the bundling assembly,



CCI0002058 (image from video taken during Marine Pipeline job in June 2000)



Bundling
assembly

Discharge
platform

CCI0002058 (image from video taken during Marine Pipeline job in June 2000)

<p>wherein the conveyor assembly includes a frame,</p>	 <p>Conveyor frame</p> <p>CCI0002058 (image from video taken during Marine Pipeline job in June 2000)</p>
<p>a pivotal connection for the frame to permit angular adjustment</p>	<p>The 2000 Skid Hustler machine prototype, before the stacking assembly was added to the back of the 2000 Skid Hustler machine in 2000, includes a pivotal connection for the frame to permit angular adjustment of the frame relative to the chassis:</p>

of the frame
relative to
the chassis,



Extendible mast

Pivotal connection

CCI0003706



Pivotal connection

CCI0003715 (photo taken in fall 1999)



Pivotal connection

CCI0003700 (photo taken in 1999)

When the 2000 Skid Hustler machine was modified to include the stacking assembly on the back of the machine in 2000, the conveyer assembly and pivotal connection for the frame to permit angular adjustment of the frame relative to the chassis remained the same:



Pivotal connection

CCI0002058 (image from video taken during Marine Pipeline job in June 2000)

an
extendible

The 2000 Skid Hustler machine prototype, before the stacking assembly was added to the back of the 2000 Skid Hustler machine in 2000, includes an extendible mast connected between the frame and the chassis to

mast
connected
between the
frame and
the chassis
to drive the
frame about
the pivotal
connection

drive the frame about a pivotal connection:



Pivotal connection

Extendible mast

CCI0003715 (photo taken in fall 1999)



Pivotal connection

Extendible mast

CCI0002058 (image from video taken October 19, 1999 on a Marine Pipeline job)



CCI0003706

When the 2000 Skid Hustler machine was modified to include the stacking assembly on the back of the machine in 2000, the conveyer assembly and extendible mast connected between the frame and the chassis to drive the frame about a pivotal connection remained the same:



CCI0002058 (image from video taken during Marine Pipeline job in June 2000)



Pivotal connection

Extendible mast

CCI0002058 (image from video taken during Marine Pipeline job in June 2000)

and a
receiving bin
and a
conveyor
carried on
the frame,



CCI0002058 (image from video taken during Marine Pipeline job in June 2000)

the conveyor positioned between the receiving bin and the stacking assembly and being operable to move lumber from the receiving bin to the stacking assembly

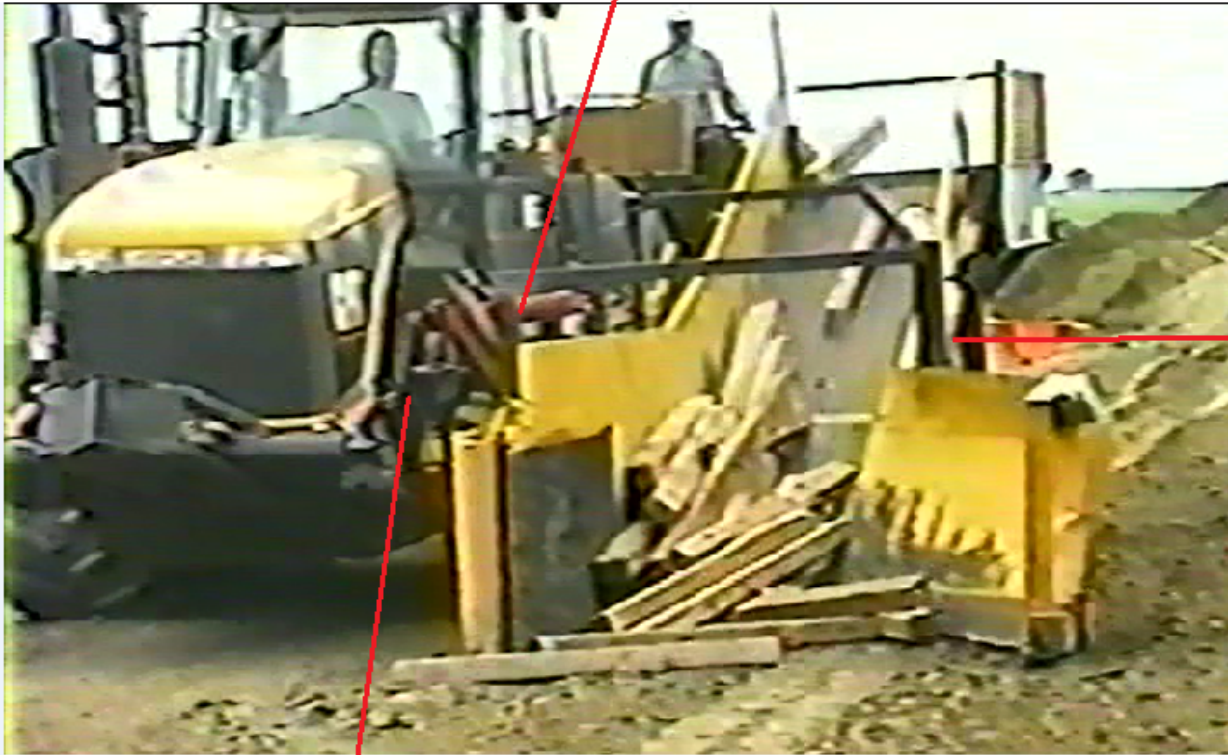


CCI0002058 (image from video taken during Marine Pipeline job in June 2000)

and the mast being operable to drive adjustment of the angle of the frame relative to the chassis to select the approach angle for the conveyor relative to the stacking assembly.



CCI0002058 (image from video taken during Marine Pipeline job in June 2000)

	<p data-bbox="1037 201 1213 224">Extendible mast</p>  <p data-bbox="1797 581 1902 636">Conveyer frame</p> <p data-bbox="806 1071 890 1094">Chassis</p> <p data-bbox="491 1107 1507 1140">CCI0002058 (image from video taken during Marine Pipeline job in June 2000)</p>
Claim 2	

The apparatus of claim 1 wherein the mast drives the frame adjacent the receiving bin to select a spacing between the frame and the chassis.



CCI0002058 (image from video taken during Marine Pipeline job in June 2000)

Claim 4

The apparatus of claim 1 wherein the stacking assembly further includes a pivoting arrangement for tilting the stacking assembly relative to the chassis to provide for substantial leveling of the stacking assembly when operating on uneven ground surfaces.



Two hydraulic cylinders tilt the stacking assembly relative to the chassis to level the stacking assembly on uneven terrain

CCI0002058 (image from video taken during Marine Pipeline job in June 2000)



Four point hitch including hydraulic cylinders that adjusts angle of stacking assembly relative to the chassis to accomodate changes in ground contour

CCI0002058 (image from video taken during Marine Pipeline job in June 2000)

Claim 6

The apparatus of claim 1 wherein the mast includes a hydraulic cylinder drivable to telescope to various lengths.



Hydraulic cylinder

Extendible mast

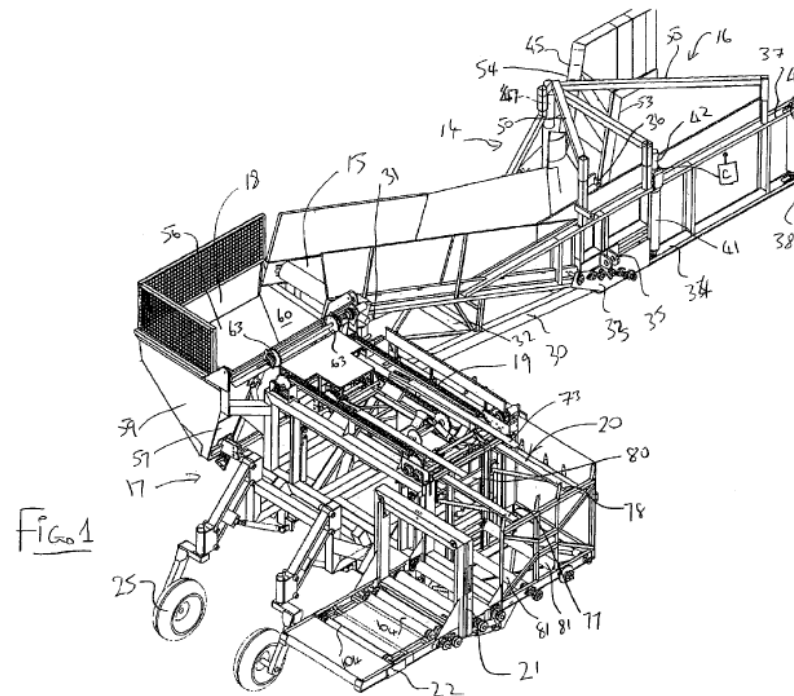
CCI0003706

EXHIBIT D

Invalidity Contentions Claim Chart for U.S. Patent No. 7,591,629
Claims 1, 2, 4 and 6 in view of McLeod/Pisony and McWilliams under 35 U.S.C. § 103

Claim 1	McLeod/Pisony
An apparatus for picking up, stacking and bundling lumber, comprising:	The preamble is not a limitation. However, to the extent it could be construed to be a limitation, the '202 patent discloses an apparatus for picking up, stacking and bundling lumber": "[a]n apparatus for picking, conveying, stacking and bundling lumber pieces from the grounds ..." McLeod/Pisony, Abstract (57)
(a) a chassis,	"The elements provided by the picking and conveyer assembly 14 , the stacking assembly 17 and the bundling assembly 21 are all mounted on a frame for common movement with the vehicle 10 in the working direction 13 . The frame carrying these elements is attached to the vehicle by a four point hitch 23 at the rear of the vehicle and by coupling assembly generally indicated at 24 at the side of the vehicle and inwardly of the picking and conveyer assembly 14 . McLeod/Pisony, p. 11, l. 23-p. 12, l. 3.

	<p>FIG. 1</p>
(b) a grapple carried with the chassis,	<p>“Such an arrangement can also be used with a picking assembly in the form of a mechanically operated grapple which lifts the pieces from a large pile of the pieces for formation into stacks which are bundled and discharged. Again therefore this device in combination with a grapple type picking assembly is portable on a suitable trailer or frame carried by a vehicle so that it can be moved to a pile or collection of the piecing for stacking.” ‘McLeod/Pisony, p. 13, ll. 2-7.</p>
(c) a conveyor assembly supported on the chassis,	<p>“The apparatus further includes a picking and conveyer assembly 14 having a main conveyer 15 attached to and arranged rearwardly of a picker 16.” ‘202 patent, 4:45-47. The elements provided by the picking and conveyer assembly 14, the stacking assembly 17 and the bundling assembly 21 are all mounted on a frame for common movement with the vehicle 10 in the working direction 13. McLeod/Pisony, p. 11, ll. 18-25.</p>



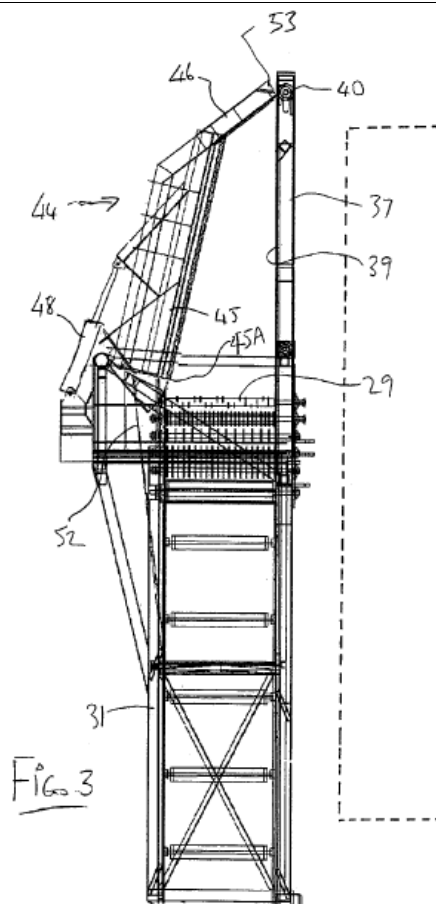
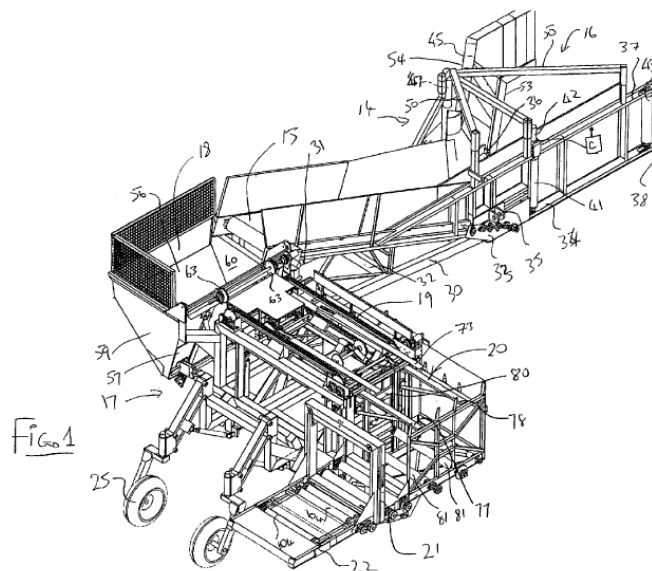
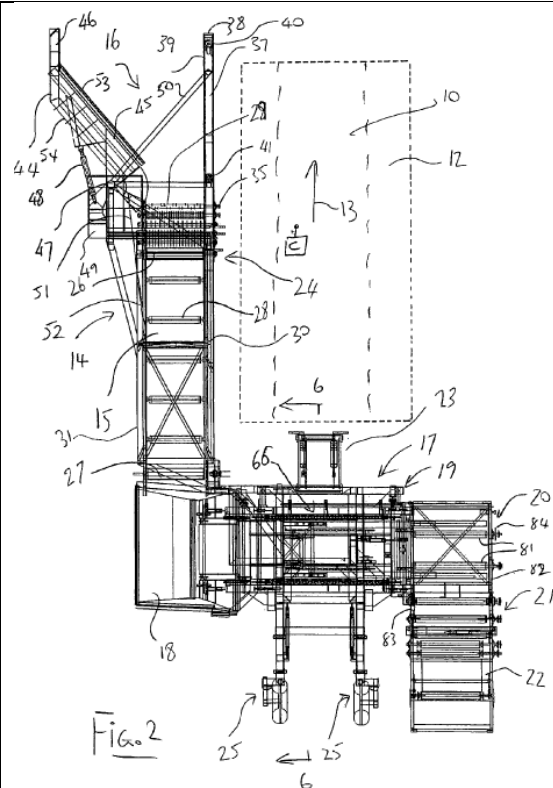


Fig. 3

(d)) a stacking assembly operatively connected adjacent the conveyor assembly, the stacking assembly including an unscrambling hopper, a row conveyor, a stacking bin and a bundling assembly, and,

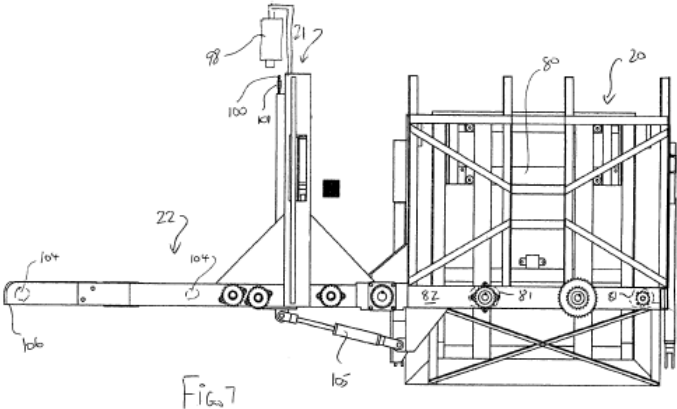
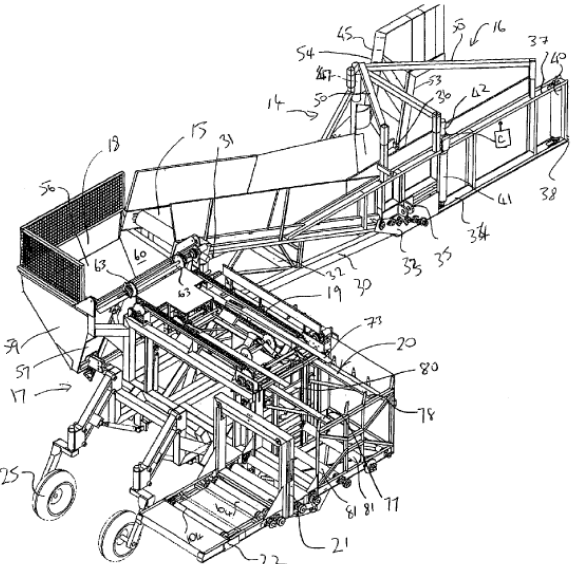
“At the rear of the conveyer **15** is provided a stacking assembly **14** generally indicated at **17** including an unscrambling hopper **18**, a row conveyor **19** and a stacking assembly **20**. The apparatus further including a bundling assembly **21** including a discharge ramp **22**.” ‘202 patent, 4:47-52. The elements provided by the picking and conveyor assembly **14**, the stacking assembly **17** and the bundling assembly **21** are all mounted on a frame for common movement with the vehicle **10** in the working direction **13**. McLeod/Pisomy, p. 11, ll. 19-25.





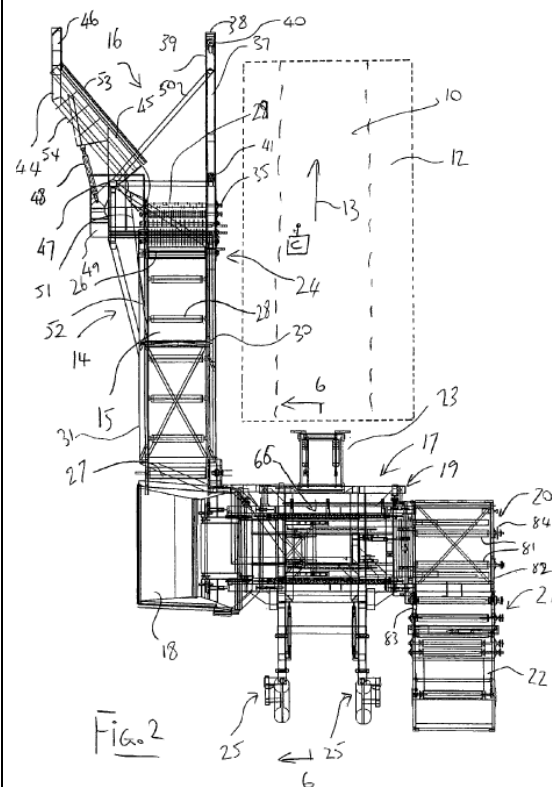
(e) a discharge platform operatively connected adjacent the bundling assembly,

The apparatus further including a bundling assembly **21** including a discharge ramp **22**.” McLeod/Pisomy, p. 11, ll. 22-23.

	 <p>FIG. 7</p>
<p>(f) wherein the conveyor assembly includes a frame,</p>	<p>“The conveyor is mounted on a frame section of the main frame having a first side 30 and a second side 31. McLeod/Pisony, p. 14, ll. 10-12.</p>  <p>FIG. 1</p>
<p>a pivotal connection for the frame to permit angular adjustment of the</p>	<p>“The side wall 30 includes mounting lugs 35 and 36 for receiving support elements of a coupling 24 which connects the side of the vehicle to the sidewall 30. The coupling</p>

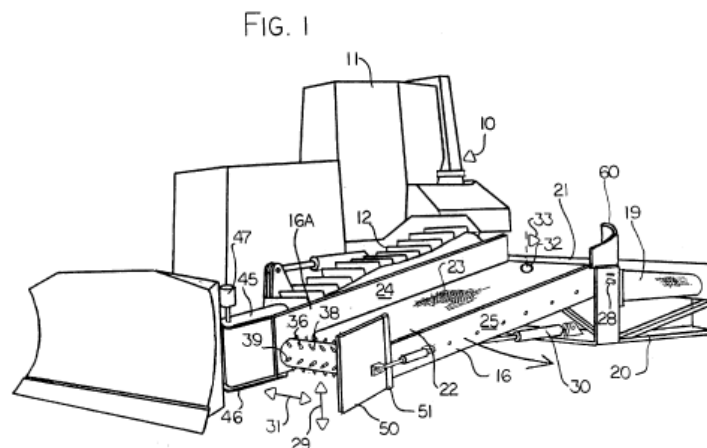
frame relative to the chassis,

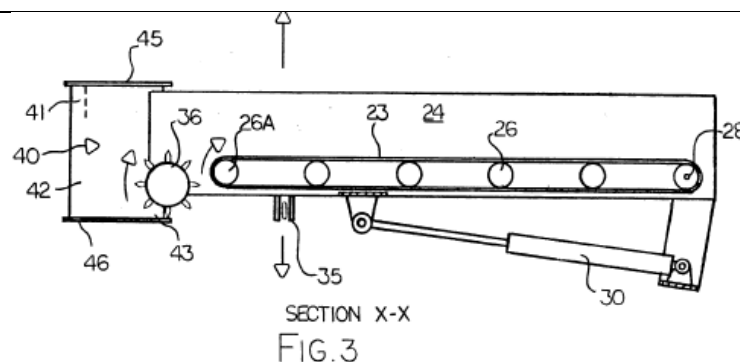
element **24** includes a link which allows the frame to pivot inwardly and outwardly about a horizontal axis parallel to the direction **13** so that the picking section can pivot outwardly and upwardly or outwardly and downwardly to accommodate changes in ground contour. In addition to the angle of the bottom skid **34** about a horizontal pivot axis transverse to the direction **13** can be changed by actuating the four point hitch connection **23** and/or by lifting the linkage **24**.” McLeod/Pisony, p. 14, ll. 19-25.



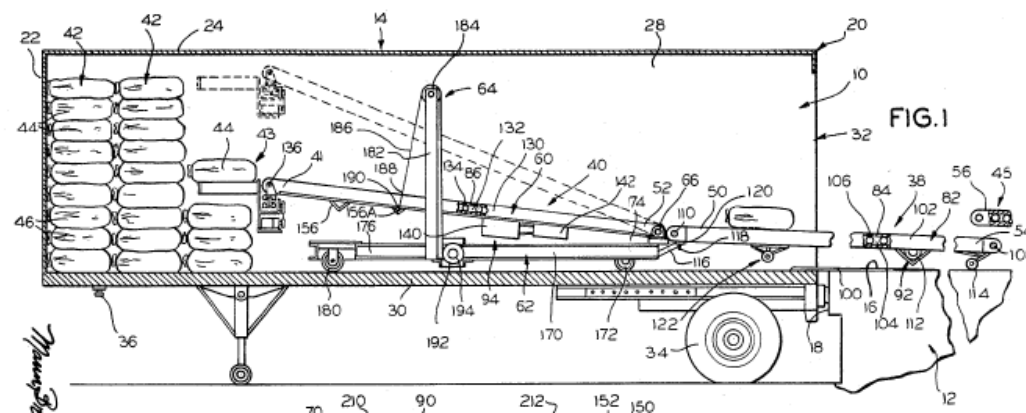
“In US patent 5934861 issued August 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2241682 published 26th February 1999, a first proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of

basic principles which are used herein and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisony, p. 2, ll. 10-16. “The conveyer table **16** is mounted for pivotal movement about a horizontal pivot shaft **28** defining a pivot access adjacent the feed end **17a** for upward and downward vertical movement **29** of the forward end **27** of the conveyer table. Actuation of the vertical movement **29** is effected by a hydraulic drive cylinder **30** connected between the frame **20** and the underside of the conveyer table.” ‘861 patent, 2:66-3:5; “means mounting the conveyor table for movement of the forward end vertically up and down for adjustment of the height of the forward end.” ‘861 patent, 4:38-40.



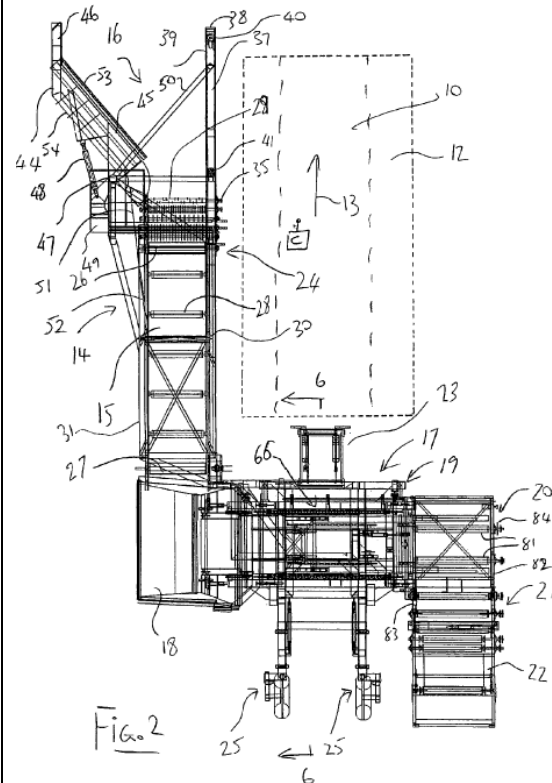


McWilliams: “The conveyor 40 comprises a conveyor frame 60 pivotally mounted at its end 52 on wheel frame 62 which rides on floor 30 of body 14. Connected between the conveyor frame 60 and wheel frame 62 is a power operated elevating mechanism 64 which operates to tilt the frame 60 about its pivotal axis 66 to raise the frame 60 between a substantially horizontal position and the dashed line position of FIG. 1 to facilitate stacking of the bags.” McWilliams, 3:11-19. “Thus, actuation of motor 196, which preferably is of the reversably operable type, effects raising and lowering of the end 41 of conveyor frame 60 about axis 66.” McWilliams, 5:60-63.



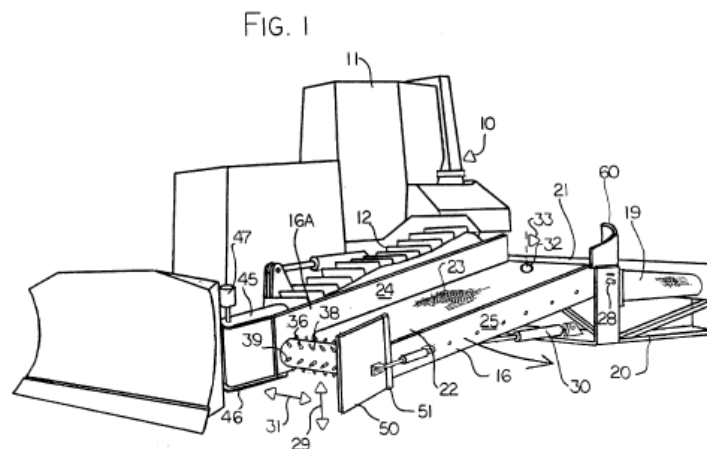
an extendible mast connected between the frame and the chassis to drive the frame about the pivotal connection

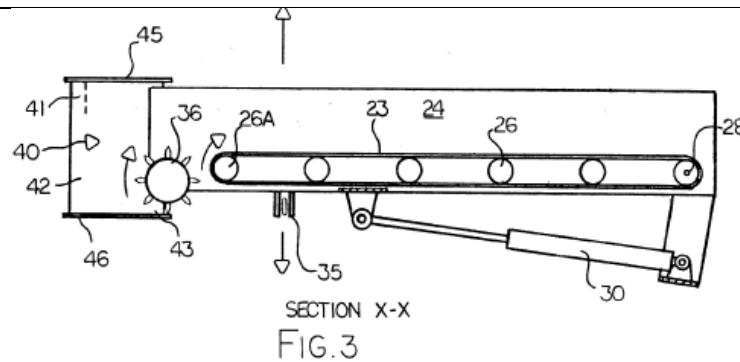
“The side wall **30** includes mounting lugs **35** and **36** for receiving support elements of a coupling **24** which connects the side of the vehicle to the sidewall **30**. The coupling element **24** includes a link which allows the frame to pivot inwardly and outwardly about a horizontal axis parallel to the direction **13** so that the picking section can pivot outwardly and upwardly or outwardly and downwardly to accommodate changes in ground contour. In addition to the angle of the bottom skid **34** about a horizontal pivot axis transverse to the direction **13** can be changed by actuating the four point hitch connection **23** and/or by lifting the linkage **24**.” McLeod/Pisony, p. 14, ll. 17-25.



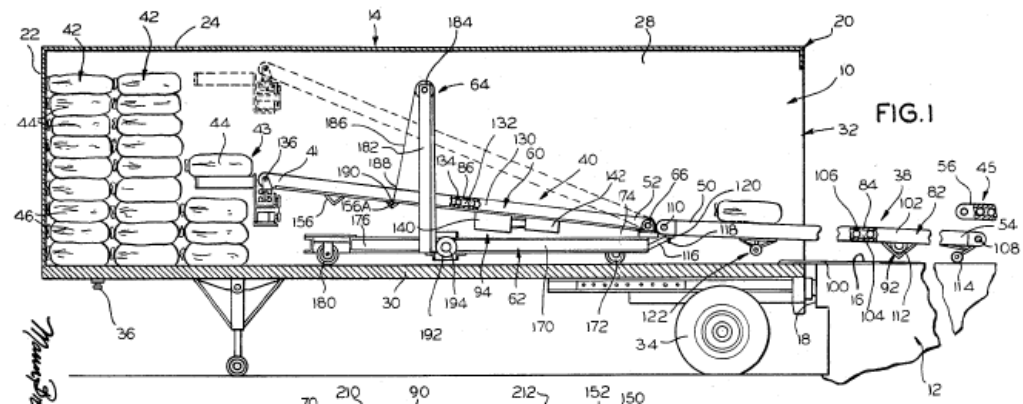
“In U.S. Pat. No. 5,934,861 issued Aug. 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2.241.682 published 26th Feb. 1999, a first

proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisony, p. 2, ll. 10-16. “The conveyer table **16** is mounted for pivotal movement about a horizontal pivot shaft **28** defining a pivot access adjacent the feed end **17a** for upward and downward vertical movement **29** of the forward end **27** of the conveyer table. Actuation of the vertical movement **29** is effected by a hydraulic drive cylinder **30** connected between the frame **20** and the underside of the conveyer table.” ‘861 patent, 2:66-3:5; “means mounting the conveyor table for movement of the forward end vertically up and down for adjustment of the height of the forward end.” ‘861 patent, 4:38-40.



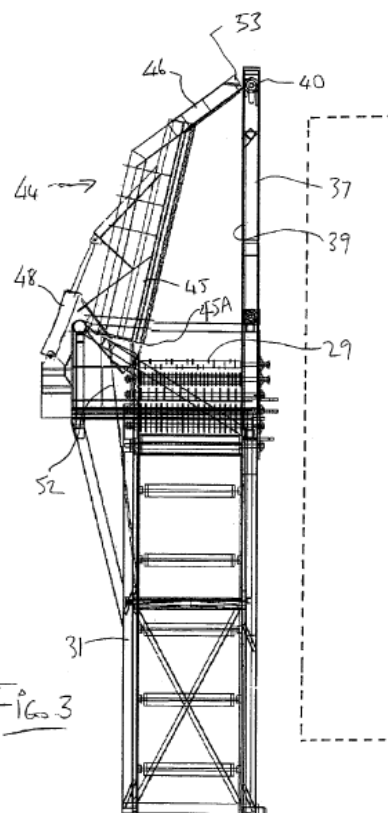


McWilliams: “The conveyor 40 comprises a conveyor frame 60 pivotally mounted at its end 52 on wheel frame 62 which rides on floor 30 of body 14. Connected between the conveyor frame 60 and wheel frame 62 is a power operated elevating mechanism 64 which operates to tilt the frame 60 about its pivotal axis 66 to raise the frame 60 between a substantially horizontal position and the dashed line position of FIG. 1 to facilitate stacking of the bags.” McWilliams, 3:11-19. “Thus, actuation of motor 196, which preferably is of the reversably operable type, effects raising and lowering of the end 41 of conveyor frame 60 about axis 66.” McWilliams, 5:60-63.

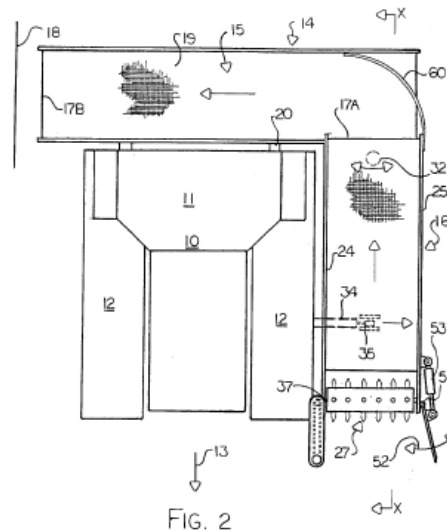


and a receiving bin and a conveyor carried on the frame,

“The conveyor **15** includes a conveyer belt having a forward end **26** and a rear end **27** and is mounted on a plurality of support rollers **28** so that an upper run of the belt carries the pieces rearwardly and upwardly from the forward end **26** into the unscrambling hopper **18** at the rear end **27**.” McLeod/Pisony, p. 13, ll. 8-11. “In front of the conveyer belt is provided a plurality of picking rollers **28** arranged in a row in front of the front roller of the conveyer. ... The front picking rollers therefore act to lift the pieces off the ground or in some cases out of embedded position within the ground by the spikes of the disc engaging in the pieces and lifting them upwardly onto the top of the rollers for movement rearwardly onto the conveyor.” McLeod/Pisony, p. 13, l. 12-p. 14, l. 9.



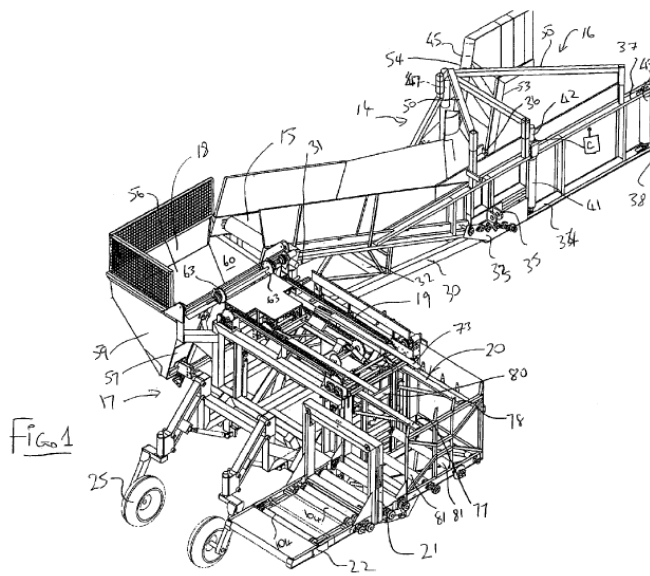
“In U.S. Pat. No. 5,934,861 issued Aug. 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2.241.682 published 26th Feb. 1999, a first proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisony, p. 2, ll. 10-16. “The vehicle carries a picking and conveying system generally indicated at **14** including a main conveyor **15** and a conveyor table **16** feeding the main conveyor **15**. The main conveyor is mounted behind cab **11** of the vehicle from the feed end **16a** of the conveyor to a discharge end **17** of conveyor ...” ‘861 patent, 2:48-53. “The conveyor table includes a conveyor section **22** having a side belt **23** ...” ‘861 patent, 2:58-60.

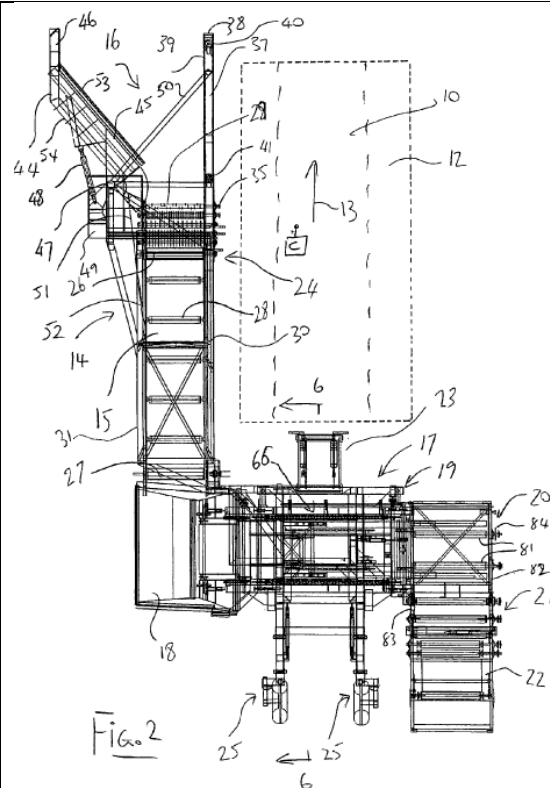


the conveyor positioned between the receiving bin and the stacking assembly and being operable to move lumber from the receiving

“The conveyor **15** includes a conveyor belt having a forward end **26** and a rear end **27** and is mounted on a plurality of support rollers **28** so that an upper run of the belt carries the pieces rearwardly and upwardly from the forward end **26** into the unscrambling hopper **18** at the rear end **27**.” McLeod/Pisony, p. 13, ll. 8-11

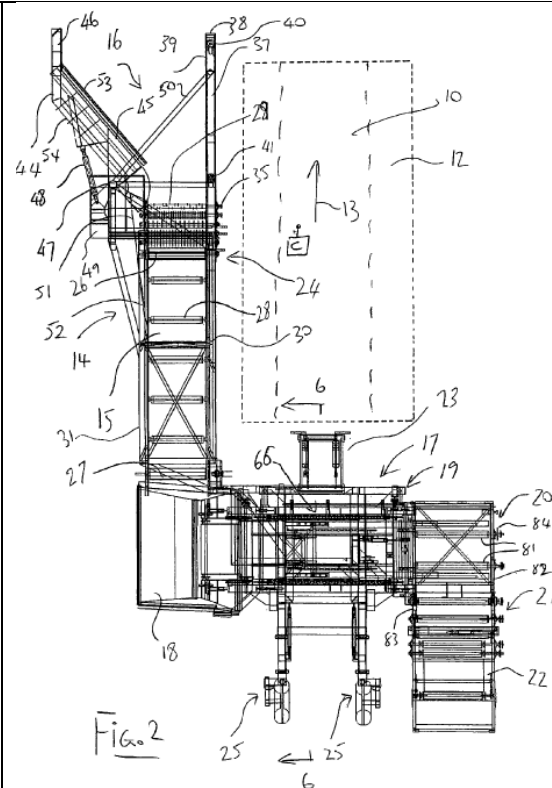
bin to the stacking assembly





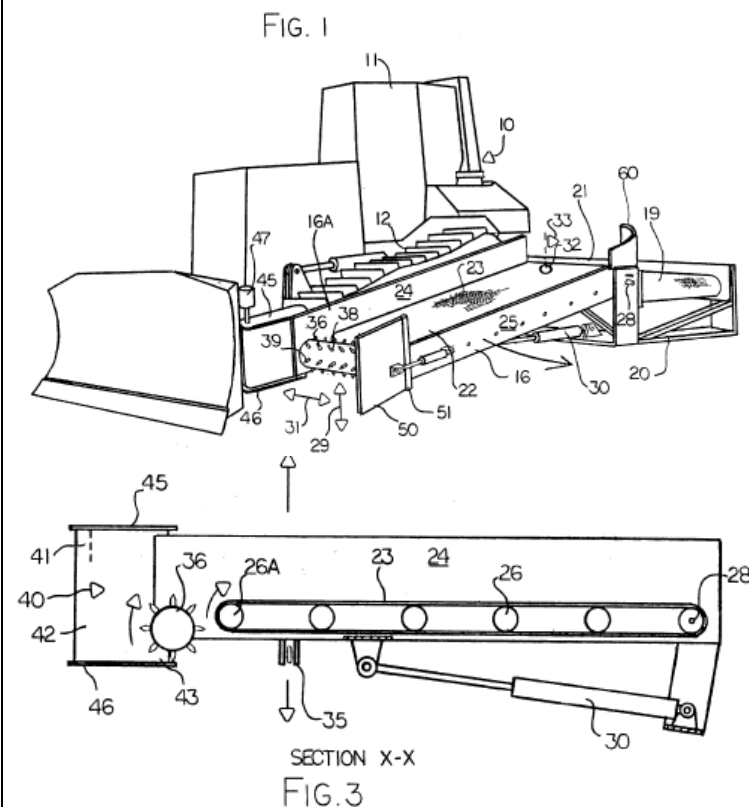
and the mast being operable to drive adjustment of the angle of the frame relative to the chassis to select the approach angle for the conveyer relative to the stacking assembly.

“The side wall **30** includes mounting lugs **35** and **36** for receiving support elements of a coupling **24** which connects the side of the vehicle to the sidewall **30**. The coupling element **24** includes a link which allows the frame to pivot inwardly and outwardly about a horizontal axis parallel to the direction **13** so that the picking section can pivot outwardly and upwardly or outwardly and downwardly to accommodate changes in ground contour. In addition to the angle of the bottom skid **34** about a horizontal pivot axis transverse to the direction **13** can be changed by actuating the four point hitch connection **23** and/or by lifting the linkage **24**.” ‘McLeod/Pisomy, p. 14ll. 17-25



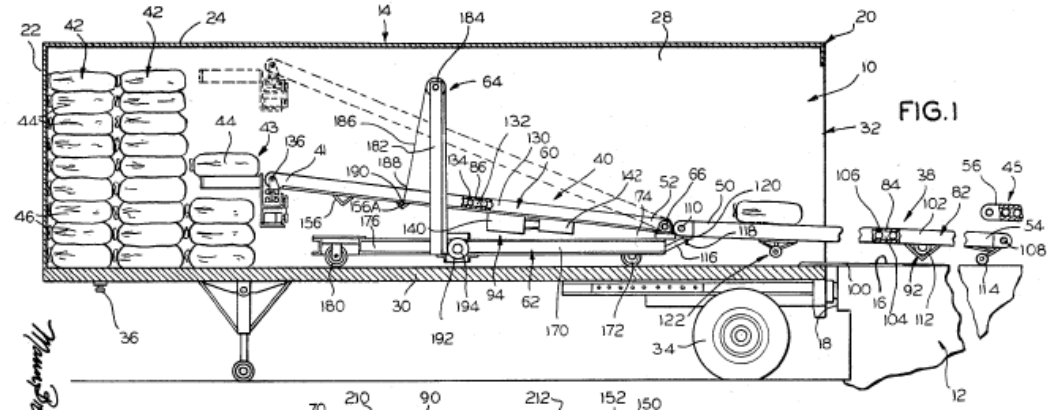
“In U.S. Pat. No. 5,934,861 issued Aug. 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2.241.682 published 26th Feb. 1999, a first proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisony, p. 2, ll. 10-16. “The conveyor table **16** is mounted for pivotal movement about a horizontal pivot shaft **28** defining a pivot access adjacent the feed end **17a** for upward and downward vertical movement **29** of the forward end **27** of the conveyor table. Actuation of the vertical movement **29** is effected by a hydraulic drive cylinder **30** connected between the frame **20** and the underside of

the conveyer table.” ‘861 patent, 2:66-3:5; “means mounting the conveyer table for movement of the forward end vertically up and down for adjustment of the height of the forward end.” ‘861 patent, 4:38-40.



McWilliams: “The conveyor 40 comprises a conveyor frame 60 pivotally mounted at its end 52 on wheel frame 62 which rides on floor 30 of body 14. Connected between the conveyor frame 60 and wheel frame 62 is a power operated elevating mechanism 64 which operates to tilt the frame 60 about its pivotal axis 66 to raise the frame 60 between a substantially horizontal position and the dashed line position of FIG. 1 to facilitate stacking of the bags.” McWilliams, 3:11-19. “Thus, actuation of motor 196,

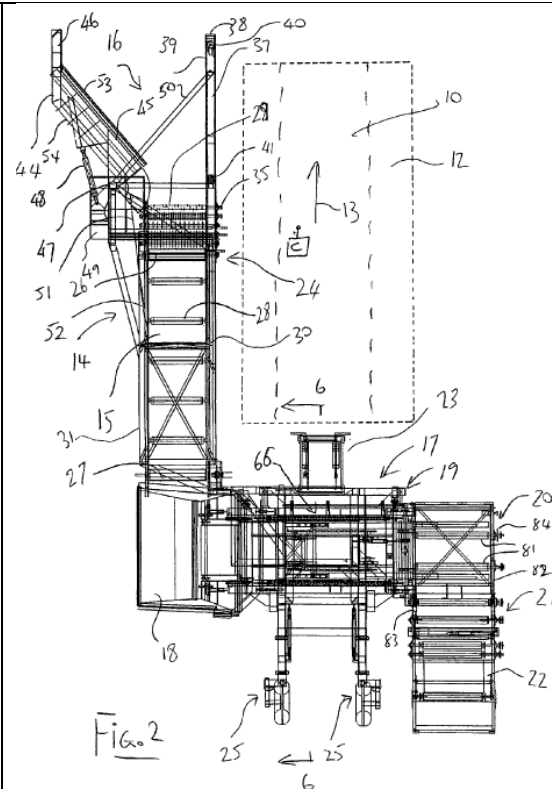
which preferably is of the reversably operable type, effects raising and lowering of the end 41 of conveyor frame 60 about axis 66.” McWilliams, 5:60-63.



Claim 2

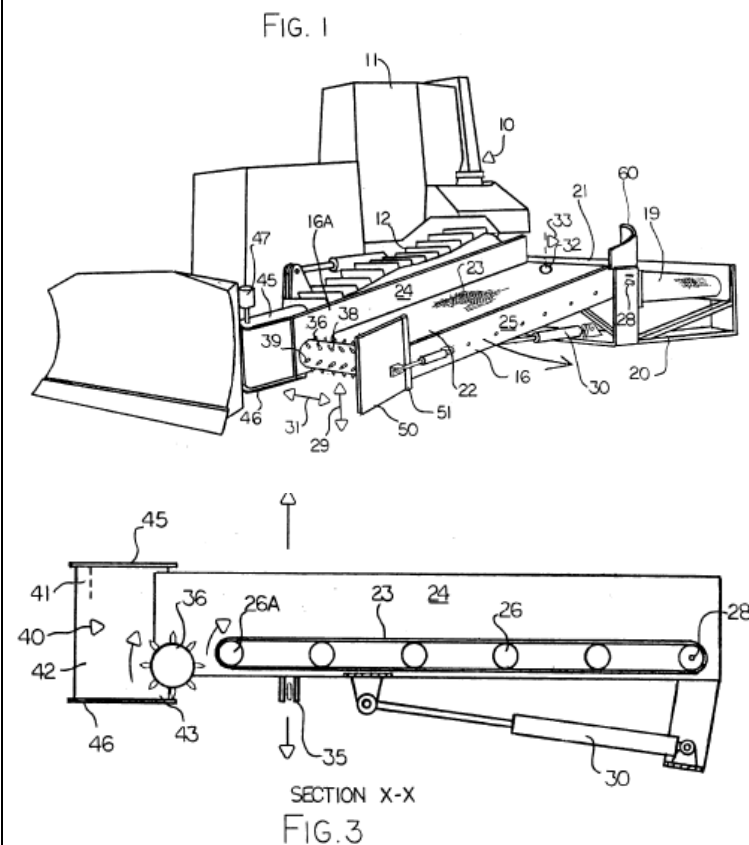
The apparatus of claim 1 wherein the mast drives the frame adjacent the receiving bin to select a spacing between the frame and the chassis.

“The side wall 30 includes mounting lugs 35 and 36 for receiving support elements of a coupling 24 which connects the side of the vehicle to the sidewall 30. The coupling element 24 includes a link which allows the frame to pivot inwardly and outwardly about a horizontal axis parallel to the direction 13 so that the picking section can pivot outwardly and upwardly or outwardly and downwardly to accommodate changes in ground contour. In addition to the angle of the bottom skid 34 about a horizontal pivot axis transverse to the direction 13 can be changed by actuating the four point hitch connection 23 and/or by lifting the linkage 24.” McLeod/Pisony, p. 14, 17-25.



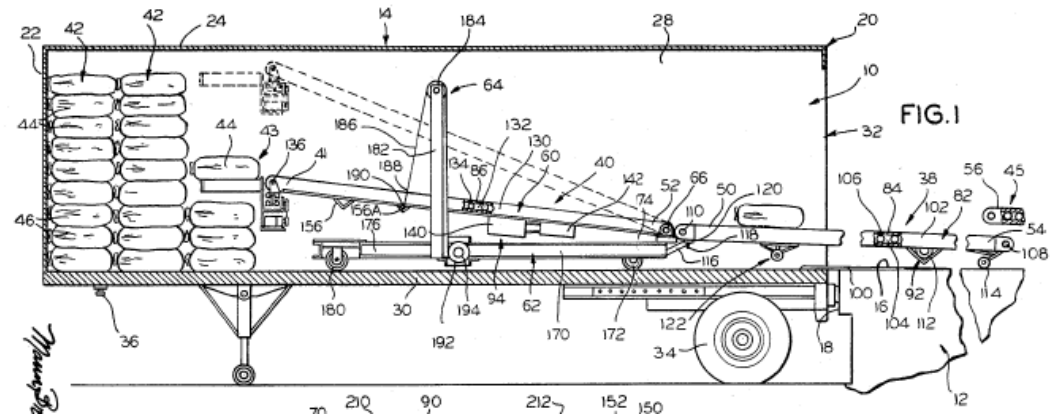
“In U.S. Pat. No. 5,934,861 issued Aug. 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2,241,682 published 26th Feb. 1999, a first proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisony, p. 2, ll. 10-16. “The conveyer table **16** is mounted for pivotal movement about a horizontal pivot shaft **28** defining a pivot access adjacent the feed end **17a** for upward and downward vertical movement **29** of the forward end **27** of the conveyer table. Actuation of the vertical movement **29** is effected by a hydraulic drive cylinder **30** connected between the frame **20** and the underside of

the conveyer table.” ‘861 patent, 2:66-3:5; “means mounting the conveyer table for movement of the forward end vertically up and down for adjustment of the height of the forward end.” ‘861 patent, 4:38-40.



McWilliams: “The conveyor 40 comprises a conveyor frame 60 pivotally mounted at its end 52 on wheel frame 62 which rides on floor 30 of body 14. Connected between the conveyor frame 60 and wheel frame 62 is a power operated elevating mechanism 64 which operates to tilt the frame 60 about its pivotal axis 66 to raise the frame 60 between a substantially horizontal position and the dashed line position of FIG. 1 to

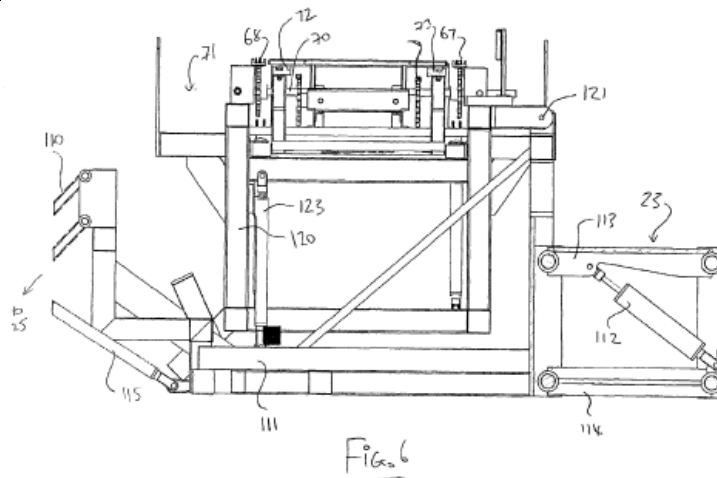
facilitate stacking of the bags.” McWilliams, 3:11-19. “Thus, actuation of motor 196, which preferably is of the reversably operable type, effects raising and lowering of the end 41 of conveyor frame 60 about axis 66.” McWilliams, 5:60-63.



Claim 4

The apparatus of claim 1 wherein the stacking assembly further includes a pivoting arrangement for tilting the stacking assembly relative to the chassis to provide for substantial leveling of the stacking assembly when operating on uneven ground surfaces.

“[T]he stacking section included in the conveyor **66** and the stacking arms on the vertical conveyor of the stacking assembly is mounted on a subframe section **120** separate from the frame section **111** and pivotally connected to the frame section **111** on a pivot pin **121**. The height of the stacking section relative to the frame section **111** can be adjusted by a cylinder **123** under control of the operator standing on the frame **71**. Thus the stacking section can be maintained substantially horizontal relative to a front to rear direction by pivoting action about the horizontal transverse pivot pin **121**.” McLeod/Pisony, p. 24, l-p. 25, l. 6.



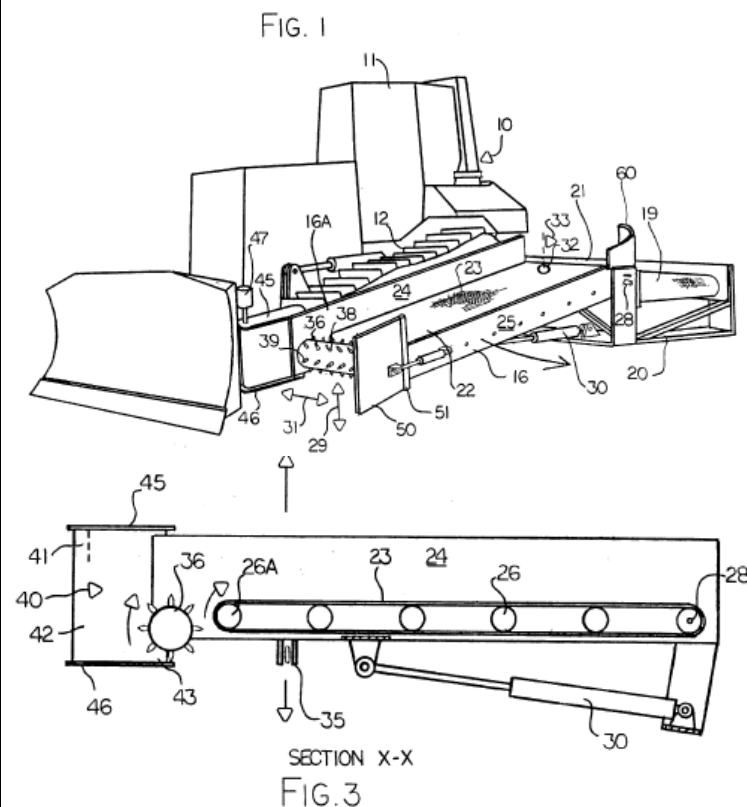
“The apparatus of claim 11 wherein the stacking assembly and the bundling assembly are mounted on a sub-frame portion of the frame which is arranged for pivotal movement relative to the frame and relative to the conveyor about a horizontal axis transverse to the direction of the movement of the vehicle to maintain the stacking assembly and bundling assembly substantially level as the vehicle moves.”
McLeod/Pisony, p. 31, ll. 11-16.

Claim 6

The apparatus of claim 1 wherein the mast includes a hydraulic cylinder drivable to telescope to various lengths.

“In U.S. Pat. No. 5,934,861 issued Aug. 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2.241.682 published 26th Feb. 1999, a first proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisony, p. 2, ll. 10-16. “The conveyer table **16** is mounted for pivotal movement about a horizontal pivot shaft **28** defining a pivot access adjacent the feed end **17a** for upward and downward vertical movement **29** of the forward end **27** of the conveyer table. Actuation of the vertical movement **29** is effected by a hydraulic drive cylinder **30** connected between the frame **20** and the underside of

the conveyer table.” ‘861 patent, 2:66-3:5; “means mounting the conveyer table for movement of the forward end vertically up and down for adjustment of the height of the forward end.” ‘861 patent, 4:38-40;



McWilliams: “The conveyor 40 comprises a conveyor frame 60 pivotally mounted at its end 52 on wheel frame 62 which rides on floor 30 of body 14. Connected between the conveyor frame 60 and wheel frame 62 is a power operated elevating mechanism 64 which operates to tilt the frame 60 about its pivotal axis 66 to raise the frame 60 between a substantially horizontal position and the dashed line position of FIG. 1 to facilitate stacking of the bags.” McWilliams, 3:11-19. “Thus, actuation of motor 196,

which preferably is of the reversably operable type, effects raising and lowering of the end 41 of conveyor frame 60 about axis 66.” McWilliams, 5:60-63.

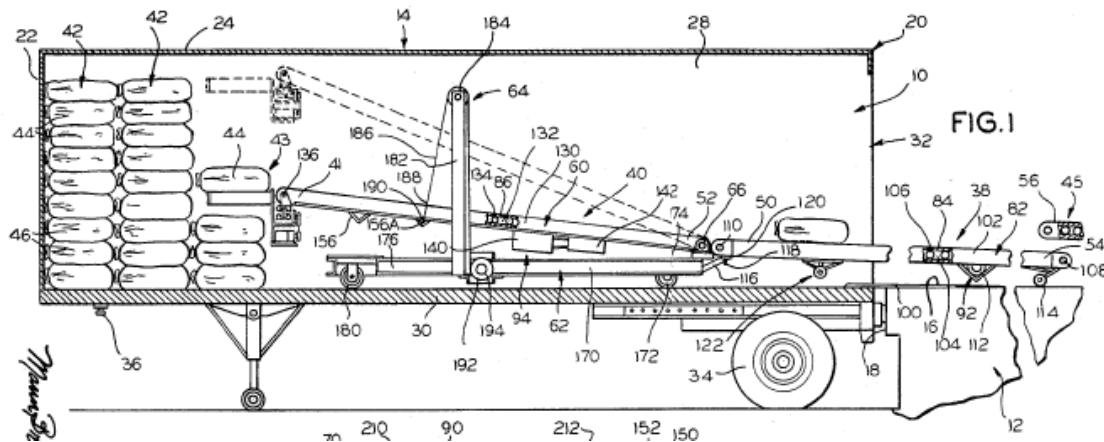
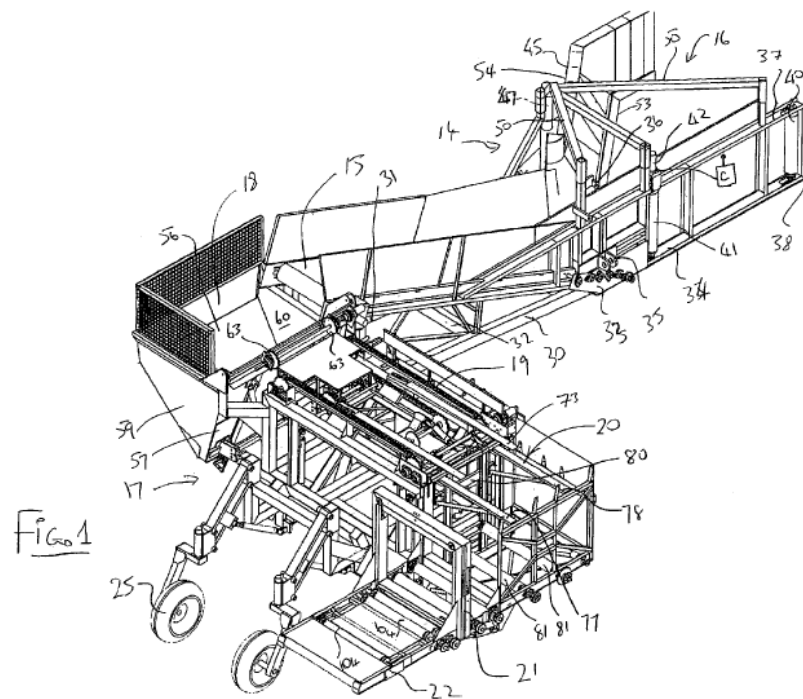


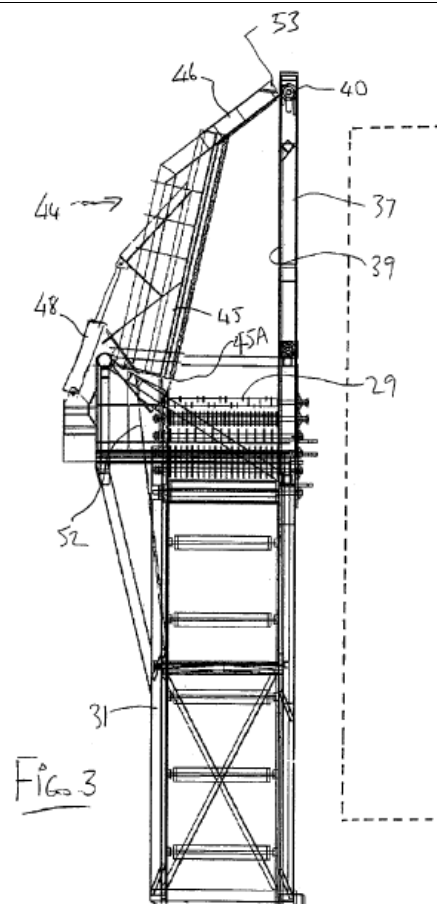
EXHIBIT E

Invalidity Contentions Claim Chart for U.S. Patent No. 7,591,629
Claims 1, 2, 4 and 6 in view of McLeod/Pisony and Ross under 35 U.S.C. § 103

Claim 1	McLeod/Pisony and Ross
An apparatus for picking up, stacking and bundling lumber, comprising:	The preamble is not a limitation. However, to the extent it could be construed to be a limitation, the '202 patent discloses an apparatus for picking up, stacking and bundling lumber": "[a]n apparatus for picking, conveying, stacking and bundling lumber pieces from the grounds ..." McLeod/Pisony, Abstract (57)
(a) a chassis,	"The elements provided by the picking and conveyer assembly 14 , the stacking assembly 17 and the bundling assembly 21 are all mounted on a frame for common movement with the vehicle 10 in the working direction 13 . The frame carrying these elements is attached to the vehicle by a four point hitch 23 at the rear of the vehicle and by coupling assembly generally indicated at 24 at the side of the vehicle and inwardly of the picking and conveyer assembly 14 . McLeod/Pisony, p. 11, l. 23-p. 12, l. 3.

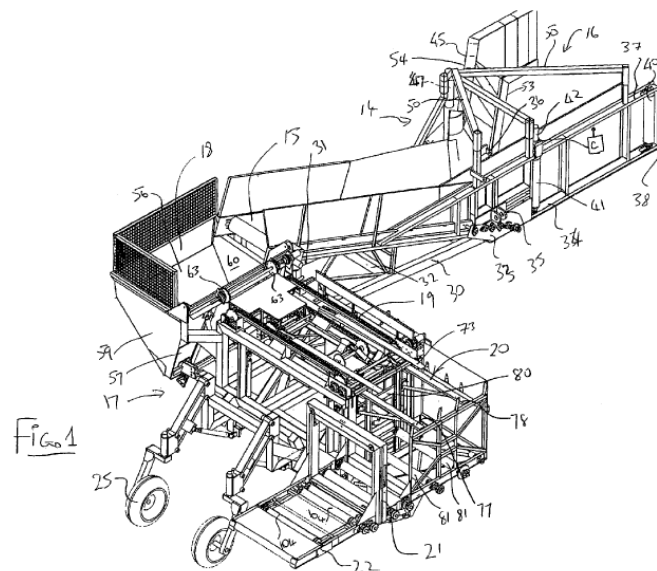
(b) a grapple carried with the chassis,	<p>“Such an arrangement can also be used with a picking assembly in the form of a mechanically operated grapple which lifts the pieces from a large pile of the pieces for formation into stacks which are bundled and discharged. Again therefore this device in combination with a grapple type picking assembly is portable on a suitable trailer or frame carried by a vehicle so that it can be moved to a pile or collection of the piecing for stacking.” ‘McLeod/Pisomy, p. 13, ll. 2-7.</p>
(c) a conveyor assembly supported on the chassis,	<p>“The apparatus further includes a picking and conveyer assembly 14 having a main conveyer 15 attached to and arranged rearwardly of a picker 16.” ‘202 patent, 4:45-47. The elements provided by the picking and conveyer assembly 14, the stacking assembly 17 and the bundling assembly 21 are all mounted on a frame for common movement with the vehicle 10 in the working direction 13. McLeod/Pisomy, p. 11, ll. 18-25.</p>

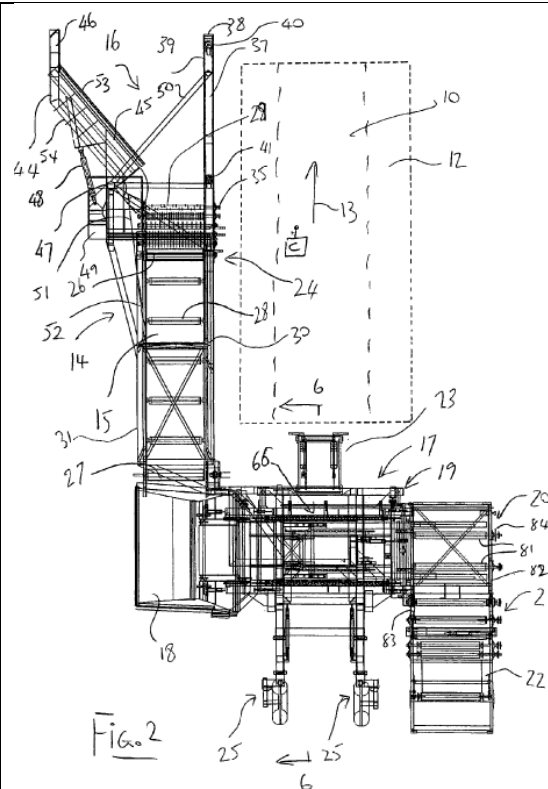




(d)) a stacking assembly operatively connected adjacent the conveyor assembly, the stacking assembly including an unscrambling hopper, a row conveyor, a stacking bin and a bundling assembly, and,

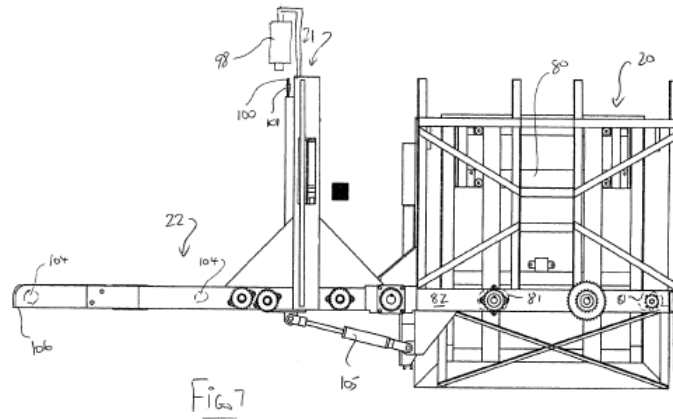
“At the rear of the conveyer **15** is provided a stacking assembly **14** generally indicated at **17** including an unscrambling hopper **18**, a row conveyer **19** and a stacking assembly **20**. The apparatus further including a bundling assembly **21** including a discharge ramp **22**.” ‘202 patent, 4:47-52. The elements provided by the picking and conveyer assembly **14**, the stacking assembly **17** and the bundling assembly **21** are all mounted on a frame for common movement with the vehicle **10** in the working direction **13**. McLeod/Pisony, p. 11, ll. 19-25.





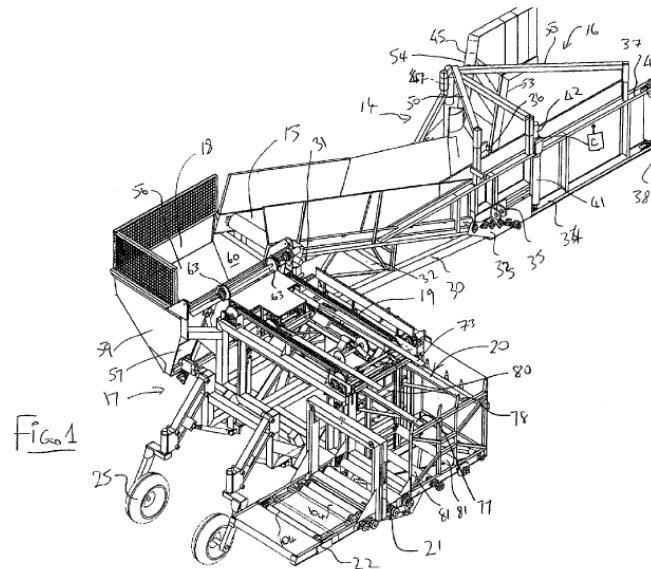
(e) a discharge platform operatively connected adjacent the bundling assembly,

The apparatus further including a bundling assembly **21** including a discharge ramp **22**.”
McLeod/Pisony, p. 11, ll. 22-23.



(f) wherein the conveyor assembly includes a frame,

“The conveyor is mounted on a frame section of the main frame having a first side **30** and a second side **31**. McLeod/Pisony, p. 14, ll. 10-12.

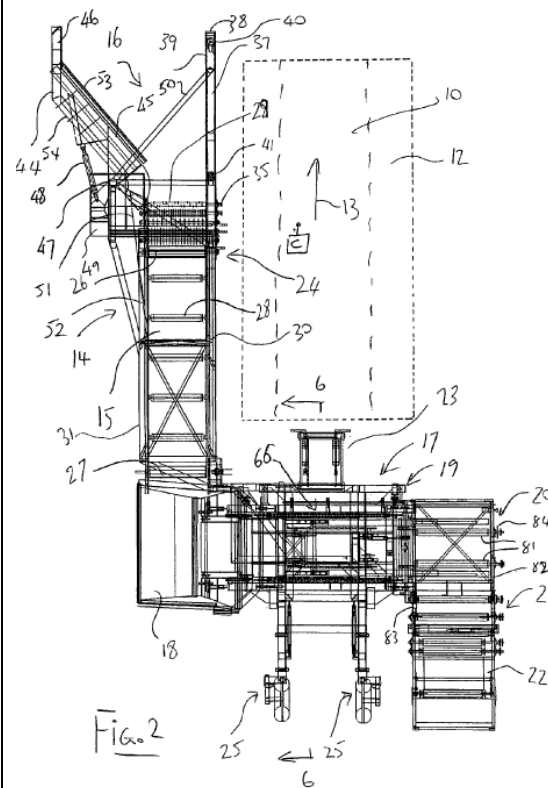


a pivotal connection for the frame to permit

“The side wall **30** includes mounting lugs **35** and **36** for receiving support elements of a coupling **24** which connects the side of the vehicle to the sidewall **30**. The coupling element **24**

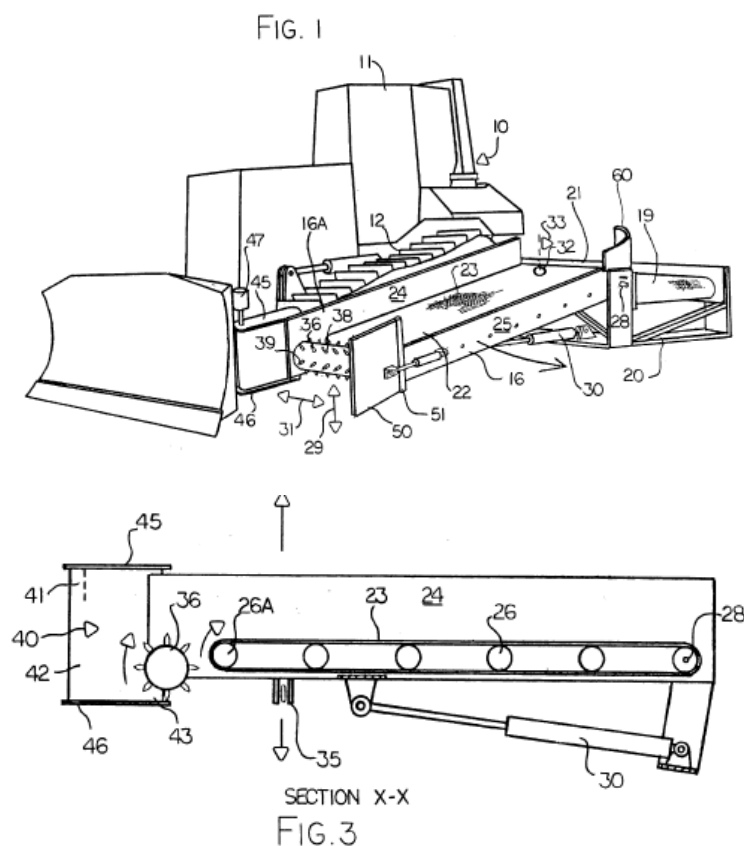
angular adjustment of the frame relative to the chassis,

includes a link which allows the frame to pivot inwardly and outwardly about a horizontal axis parallel to the direction **13** so that the picking section can pivot outwardly and upwardly or outwardly and downwardly to accommodate changes in ground contour. In addition to the angle of the bottom skid **34** about a horizontal pivot axis transverse to the direction **13** can be changed by actuating the four point hitch connection **23** and/or by lifting the linkage **24**.” McLeod/Pisony, p. 14, ll. 19-25.

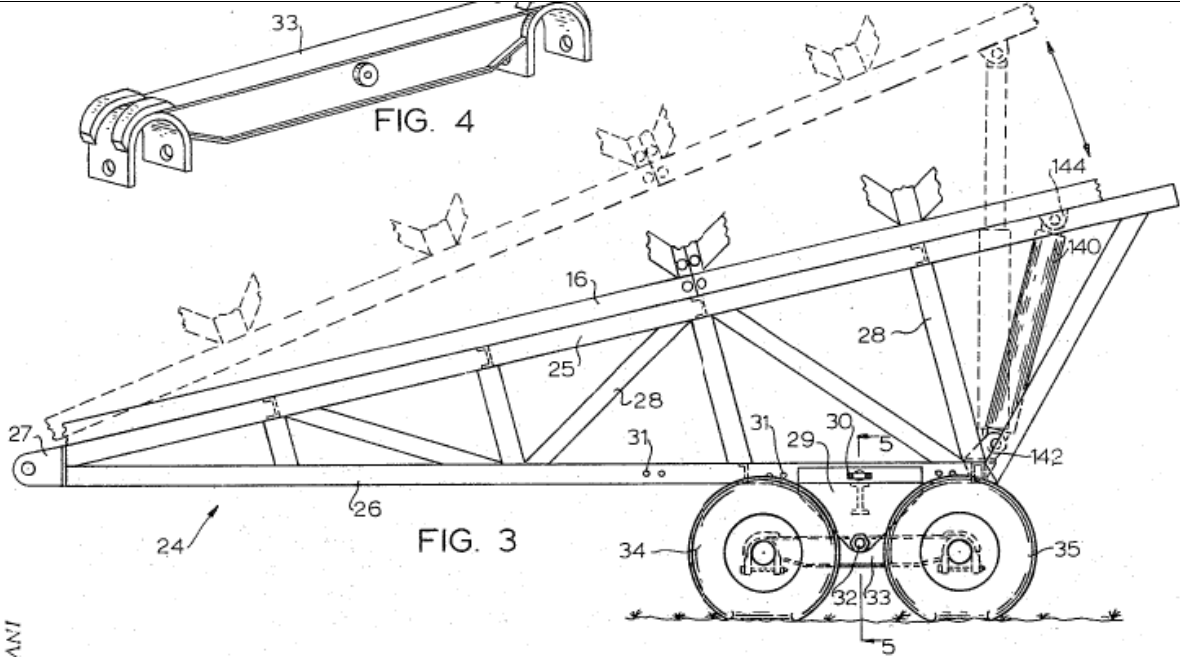


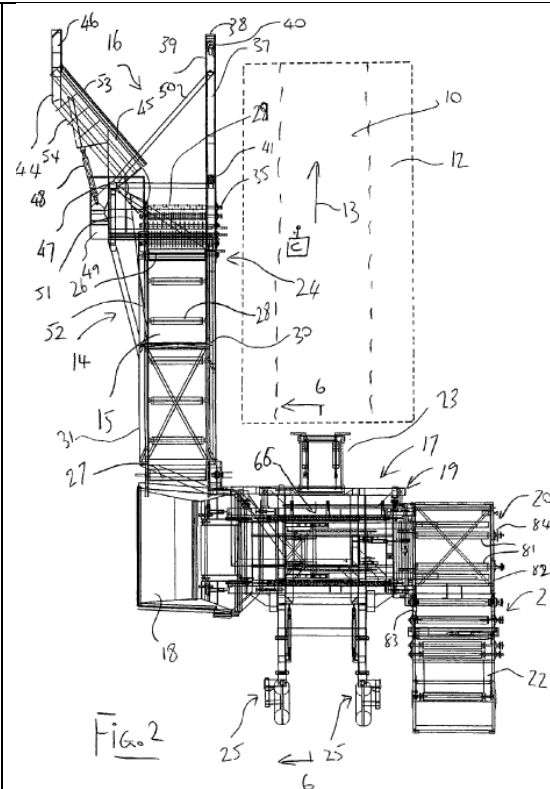
“In US patent 5934861 issued August 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2241682 published 26th February 1999, a first proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein

and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisony, p. 2, ll. 10-16. “The conveyor table **16** is mounted for pivotal movement about a horizontal pivot shaft **28** defining a pivot access adjacent the feed end **17a** for upward and downward vertical movement **29** of the forward end **27** of the conveyor table. Actuation of the vertical movement **29** is effected by a hydraulic drive cylinder **30** connected between the frame **20** and the underside of the conveyor table.” ‘861 patent, 2:66-3:5; “means mounting the conveyor table for movement of the forward end vertically up and down for adjustment of the height of the forward end.” ‘861 patent, 4:38-40.



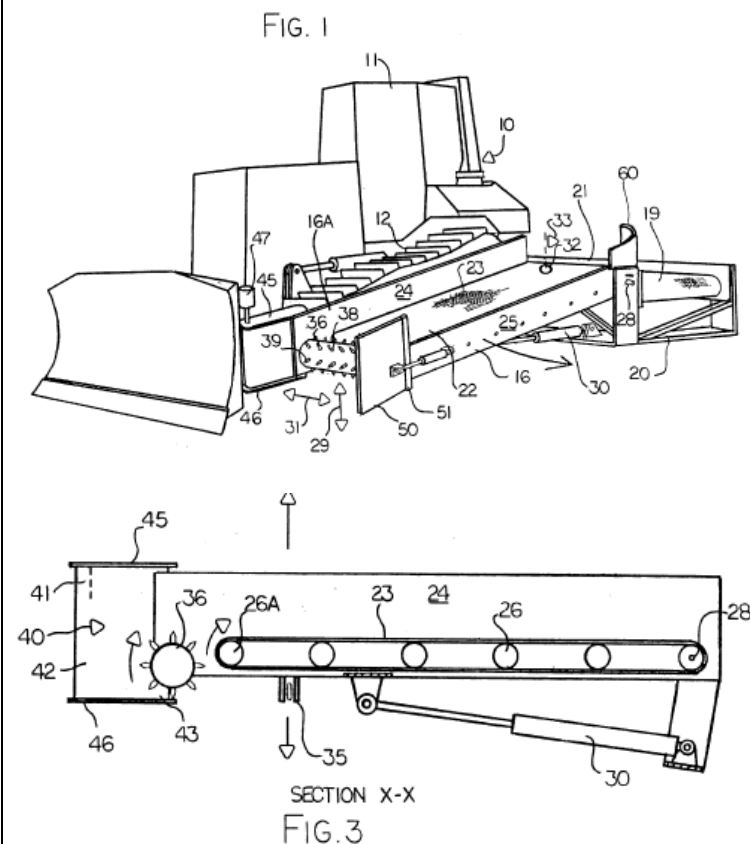
Ross: “Yet another object of this invention is to provide a rigid undercarriage structure which is pivotally connected to and supports a conveyor frame assembly with hydraulically operated lift cylinders which are adapted to pivotally tilt the conveyor frame relative to the undercarriage structure.” Ross, 1:56-61. Conveyor frame 10 is supported for transportation by means of an undercarriage structure 24. “Undercarriage structure 24 is substantially a rigid frame and is comprised of converging beam members 25 and 26 which are joined at a vertex 27 and which are rigidly positioned with respect to each other by means of truss members 28. Vertex 27 is pivotally connected to conveyor frame 10 by pin means 36 so as to adapt conveyor frame 10 to be pivoted upwardly with respect to undercarriage structure 24. Beam member 26 has removably connected thereto a pair of axle support plates 29 which are selectively secured to the same by pins 30. A plurality of holes 31 are transversely spaced through beam member 26 and are adapted to receive pins so that axle support plates 29 may be positioned at most any desired location along the length of beam member 26. Axle support plates 29 mount shaft 32 which pivotally receives walking axle 33. Walking axle 33 in turn has rotatably mounted thereon wheels 34 and 35. By selectively moving axle support plates 29 along the length of beam member 26, undercarriage structure 24 is adapted to balance and to raise and lower conveyor frame 10 for transportation purposes and to provide a strong foundation upon which conveyor frame 10 may reside. Undercarriage structure 24 may be provided with a pair of hydraulic cylinders 140 and 141 which are pivotally connected thereto by means of eyelets 142 and 143, respectively, and are pivotally connected to conveyor frame 10 by means of brackets 144 and 145, respectively (bracket 145 not shown). Hydraulic cylinders 140 and 141 are powered by a hydraulic source, hereinafter described, and are adapted to tilt conveyor frame upwardly relative to undercarriage structure 24.” Ross, 3:46-4:3.

	 <p>FIG. 3</p> <p>FIG. 4</p> <p>BY Walter E. R Shirley L. K /s/</p>
<p>an extendible mast connected between the frame and the chassis to drive the frame about the pivotal connection</p>	<p>“The side wall 30 includes mounting lugs 35 and 36 for receiving support elements of a coupling 24 which connects the side of the vehicle to the sidewall 30. The coupling element 24 includes a link which allows the frame to pivot inwardly and outwardly about a horizontal axis parallel to the direction 13 so that the picking section can pivot outwardly and upwardly or outwardly and downwardly to accommodate changes in ground contour. In addition to the angle of the bottom skid 34 about a horizontal pivot axis transverse to the direction 13 can be changed by actuating the four point hitch connection 23 and/or by lifting the linkage 24.” McLeod/Pisony, p. 14, ll. 17-25.</p>



“In U.S. Pat. No. 5,934,861 issued Aug. 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2.241.682 published 26th Feb. 1999, a first proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisony, p. 2, ll. 10-16. “The conveyer table **16** is mounted for pivotal movement about a horizontal pivot shaft **28** defining a pivot access adjacent the feed end **17a** for upward and downward vertical movement **29** of the forward end **27** of the conveyer table. Actuation of the vertical movement **29** is effected by a hydraulic drive cylinder **30** connected between the frame **20** and the underside of the conveyer table.” ‘861 patent, 2:66-3:5; “means mounting the conveyor table for movement of the

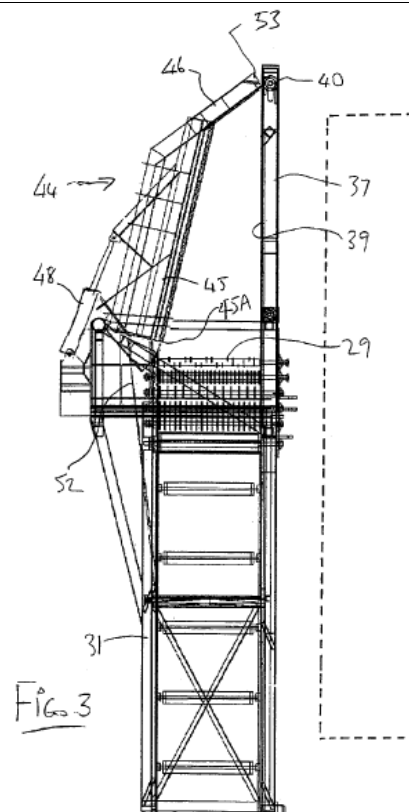
forward end vertically up and down for adjustment of the height of the forward end.” ‘861 patent, 4:38-40.



Ross: “Yet another object of this invention is to provide a rigid undercarriage structure which is pivotally connected to and supports a conveyor frame assembly with hydraulically operated lift cylinders which are adapted to pivotally tilt the conveyor frame relative to the undercarriage structure.” Ross, 1:56-61. Conveyor frame 10 is supported for transportation by means of an undercarriage structure 24. “Undercarriage structure 24 is substantially a rigid frame and is

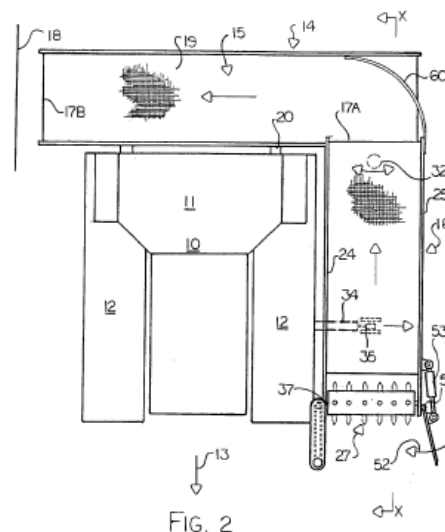
	<p>comprised of converging beam members 25 and 26 which are joined at a vertex 27 and which are rigidly positioned with respect to each other by means of truss members 28. Vertex 27 is pivotally connected to conveyor frame 10 by pin means 36 so as to adapt conveyor frame 10 to be pivoted upwardly with respect to undercarriage structure 24. Beam member 26 has removably connected thereto a pair of axle support plates 29 which are selectively secured to the same by pins 30. A plurality of holes 31 are transversely spaced through beam member 26 and are adapted to receive pins so that axle support plates 29 may be positioned at most any desired location along the length of beam member 26. Axle support plates 29 mount shaft 32 which pivotally receives walking axle 33. Walking axle 33 in turn has rotatably mounted thereon wheels 34 and 35. By selectively moving axle support plates 29 along the length of beam member 26, undercarriage structure 24 is adapted to balance and to raise and lower conveyor frame 10 for transportation purposes and to provide a strong foundation upon which conveyor frame 10 may reside. Undercarriage structure 24 may be provided with a pair of hydraulic cylinders 140 and 141 which are pivotally connected thereto by means of eyelets 142 and 143, respectively, and are pivotally connected to conveyor frame 10 by means of brackets 144 and 145, respectively (bracket 145 not shown). Hydraulic cylinders 140 and 141 are powered by a hydraulic source, hereinafter described, and are adapted to tilt conveyor frame upwardly relative to undercarriage structure 24.” Ross, 3:46-4:3.</p>
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	<p>FIG. 3</p> <p>FIG. 4</p> <p>BY Walter E. R Shirley L. K /s/</p>
<p>and a receiving bin and a conveyor carried on the frame,</p>	<p>“The conveyor 15 includes a conveyor belt having a forward end 26 and a rear end 27 and is mounted on a plurality of support rollers 28 so that an upper run of the belt carries the pieces rearwardly and upwardly from the forward end 26 into the unscrambling hopper 18 at the rear end 27.” McLeod/Pisony, p. 13, ll. 8-11. “In front of the conveyor belt is provided a plurality of picking rollers 28 arranged in a row in front of the front roller of the conveyor. ... The front picking rollers therefore act to lift the pieces off the ground or in some cases out of embedded position within the ground by the spikes of the disc engaging in the pieces and lifting them upwardly onto the top of the rollers for movement rearwardly onto the conveyor.” McLeod/Pisony, p. 13, l. 12-p. 14, l. 9.</p>



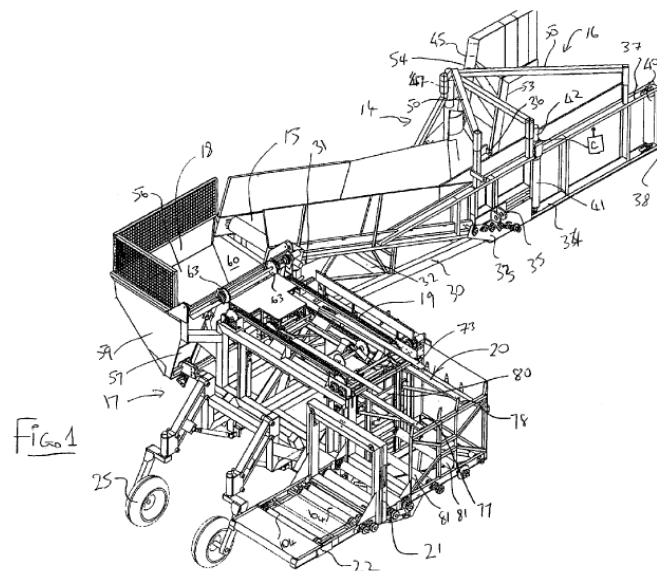
“In U.S. Pat. No. 5,934,861 issued Aug. 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2.241.682 published 26th Feb. 1999, a first proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisony, p. 2, ll. 10-16. “The vehicle carries a picking and conveying system generally indicated at **14** including a main conveyor **15** and a conveyor table **16** feeding the main conveyor **15**. The main conveyor is mounted behind cab **11** of the vehicle from the feed end **16a** of the conveyor to a discharge end **17** of conveyor ...” ‘861 patent, 2:48-53. “The conveyor table includes a conveyor section **22**

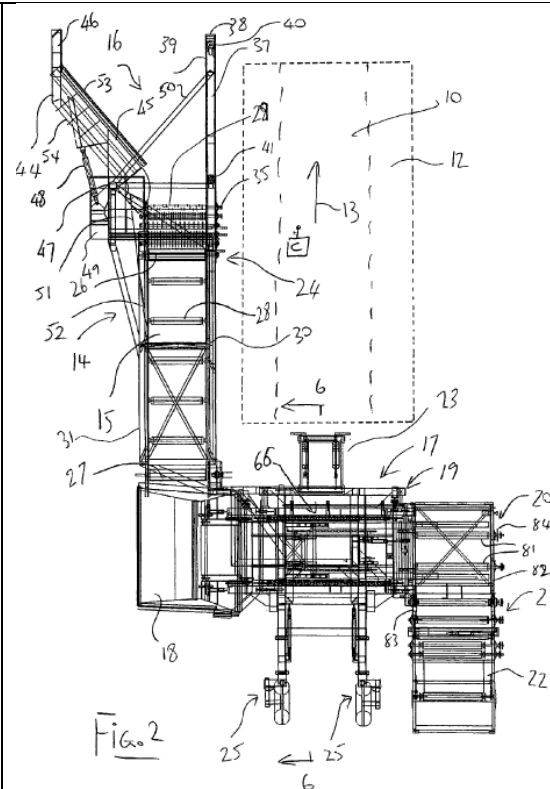
having a side belt **23** ...” ‘861 patent, 2:58-60.



the conveyor positioned between the receiving bin and the stacking assembly and being operable to move lumber from the receiving bin to the stacking assembly

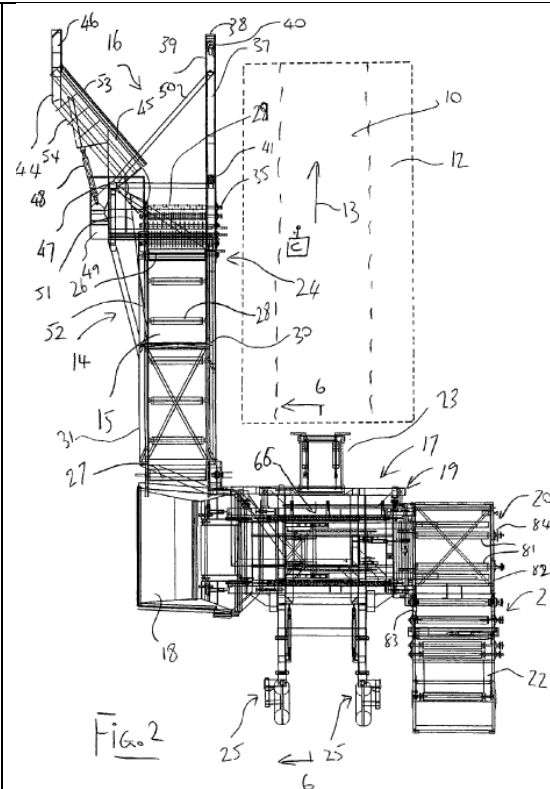
“The conveyor **15** includes a conveyor belt having a forward end **26** and a rear end **27** and is mounted on a plurality of support rollers **28** so that an upper run of the belt carries the pieces rearwardly and upwardly from the forward end **26** into the unscrambling hopper **18** at the rear end **27**.” McLeod/Pisony, p. 13, ll. 8-11





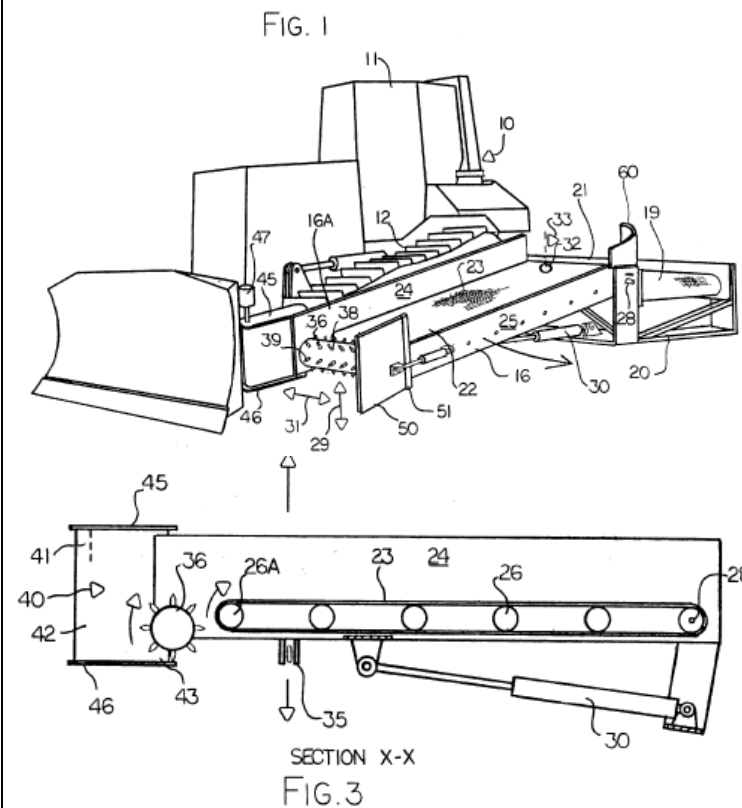
and the mast being operable to drive adjustment of the angle of the frame relative to the chassis to select the approach angle for the conveyer relative to the stacking assembly.

“The side wall **30** includes mounting lugs **35** and **36** for receiving support elements of a coupling **24** which connects the side of the vehicle to the sidewall **30**. The coupling element **24** includes a link which allows the frame to pivot inwardly and outwardly about a horizontal axis parallel to the direction **13** so that the picking section can pivot outwardly and upwardly or outwardly and downwardly to accommodate changes in ground contour. In addition to the angle of the bottom skid **34** about a horizontal pivot axis transverse to the direction **13** can be changed by actuating the four point hitch connection **23** and/or by lifting the linkage **24**.”
 ‘McLeod/Pisomy, p. 14ll. 17-25



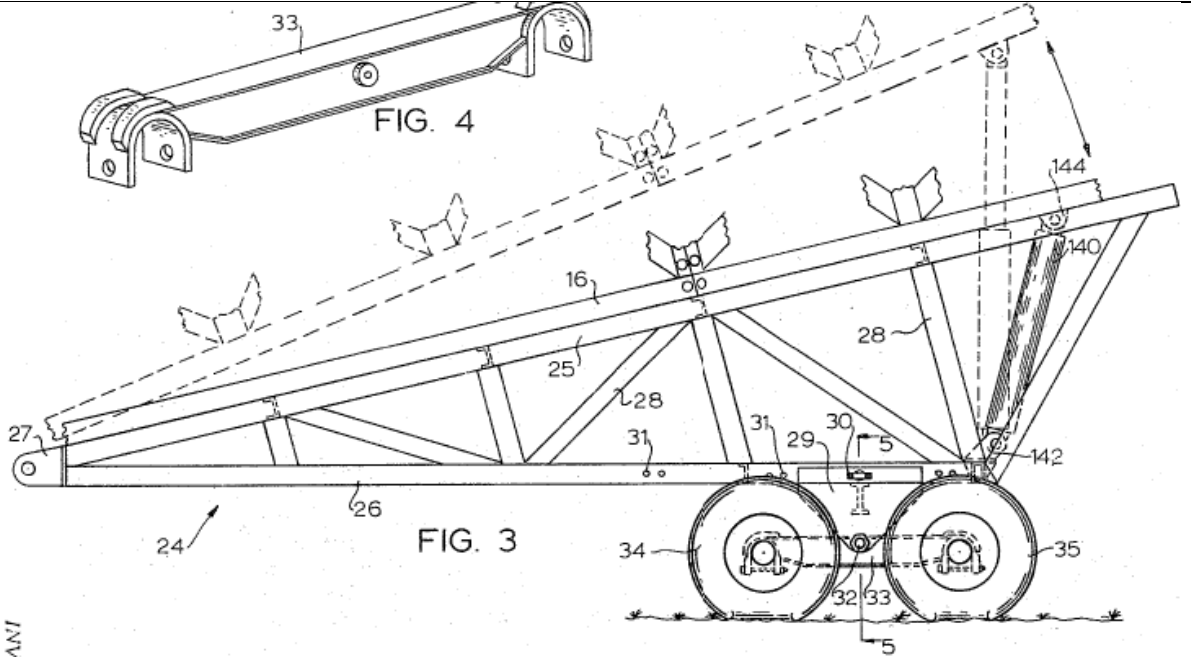
“In U.S. Pat. No. 5,934,861 issued Aug. 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2,241,682 published 26th Feb. 1999, a first proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisony, p. 2, ll. 10-16. “The conveyer table **16** is mounted for pivotal movement about a horizontal pivot shaft **28** defining a pivot access adjacent the feed end **17a** for upward and downward vertical movement **29** of the forward end **27** of the conveyer table. Actuation of the vertical movement **29** is effected by a hydraulic drive cylinder **30** connected between the frame **20** and the underside of the conveyer table.” ‘861 patent, 2:66-3:5; “means mounting the conveyer table for movement of the

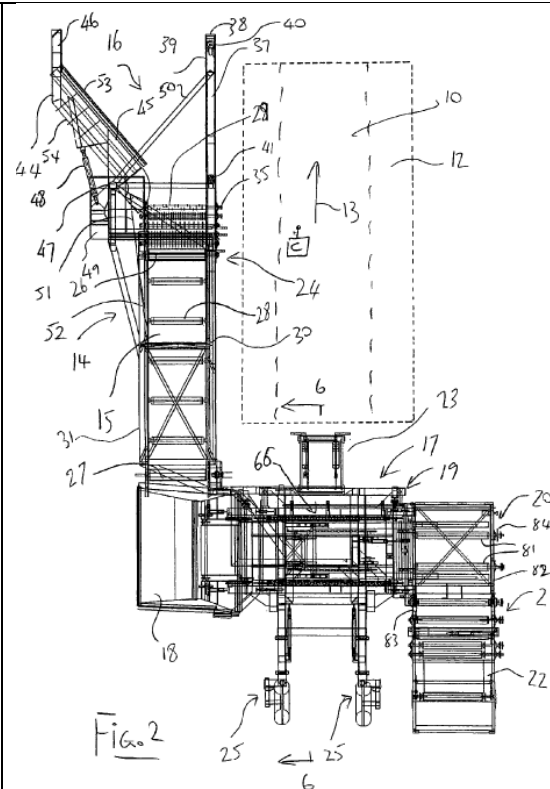
forward end vertically up and down for adjustment of the height of the forward end.” ‘861 patent, 4:38-40.



Ross: “Yet another object of this invention is to provide a rigid undercarriage structure which is pivotally connected to and supports a conveyor frame assembly with hydraulically operated lift cylinders which are adapted to pivotally tilt the conveyor frame relative to the undercarriage structure.” Ross, 1:56-61. Conveyor frame 10 is supported for transportation by means of an undercarriage structure 24. “Undercarriage structure 24 is substantially a rigid frame and is comprised of converging beam members 25 and 26 which are joined at a vertex 27 and which are

	<p>rigidly positioned with respect to each other by means of truss members 28. Vertex 27 is pivotally connected to conveyor frame 10 by pin means 36 so as to adapt conveyor frame 10 to be pivoted upwardly with respect to undercarriage structure 24. Beam member 26 has removably connected thereto a pair of axle support plates 29 which are selectively secured to the same by pins 30. A plurality of holes 31 are transversely spaced through beam member 26 and are adapted to receive pins so that axle support plates 29 may be positioned at most any desired location along the length of beam member 26. Axle support plates 29 mount shaft 32 which pivotally receives walking axle 33. Walking axle 33 in turn has rotatably mounted thereon wheels 34 and 35. By selectively moving axle support plates 29 along the length of beam member 26, undercarriage structure 24 is adapted to balance and to raise and lower conveyor frame 10 for transportation purposes and to provide a strong foundation upon which conveyor frame 10 may reside. Undercarriage structure 24 may be provided with a pair of hydraulic cylinders 140 and 141 which are pivotally connected thereto by means of eyelets 142 and 143, respectively, and are pivotally connected to conveyor frame 10 by means of brackets 144 and 145, respectively (bracket 145 not shown). Hydraulic cylinders 140 and 141 are powered by a hydraulic source, hereinafter described, and are adapted to tilt conveyor frame upwardly relative to undercarriage structure 24.” Ross, 3:46-4:3.</p>
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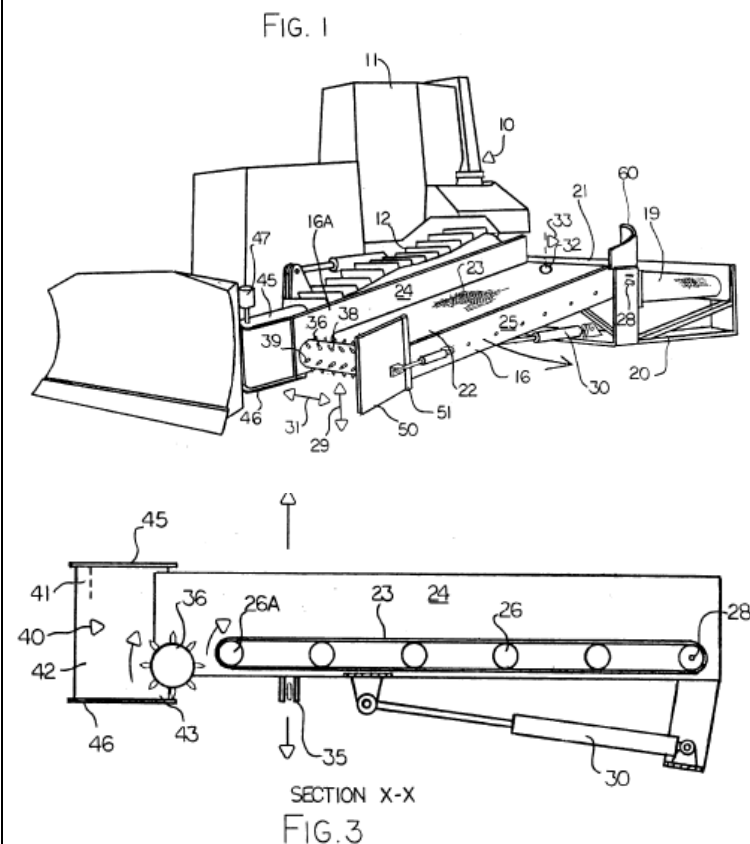
	 <p>FIG. 4</p> <p>FIG. 3</p> <p>BY Walter E. R Shirley L. K /s/</p>
<p>Claim 2</p>	
<p>The apparatus of claim 1 wherein the mast drives the frame adjacent the receiving bin to select a spacing between the frame and the chassis.</p>	<p>“The side wall 30 includes mounting lugs 35 and 36 for receiving support elements of a coupling 24 which connects the side of the vehicle to the sidewall 30. The coupling element 24 includes a link which allows the frame to pivot inwardly and outwardly about a horizontal axis parallel to the direction 13 so that the picking section can pivot outwardly and upwardly or outwardly and downwardly to accommodate changes in ground contour. In addition to the angle of the bottom skid 34 about a horizontal pivot axis transverse to the direction 13 can be changed by actuating the four point hitch connection 23 and/or by lifting the linkage 24.” McLeod/Pisomy, p. 14, 17-25.</p>



“In U.S. Pat. No. 5,934,861 issued Aug. 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2.241.682 published 26th Feb. 1999, a first proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisomy, p. 2, ll. 10-16.

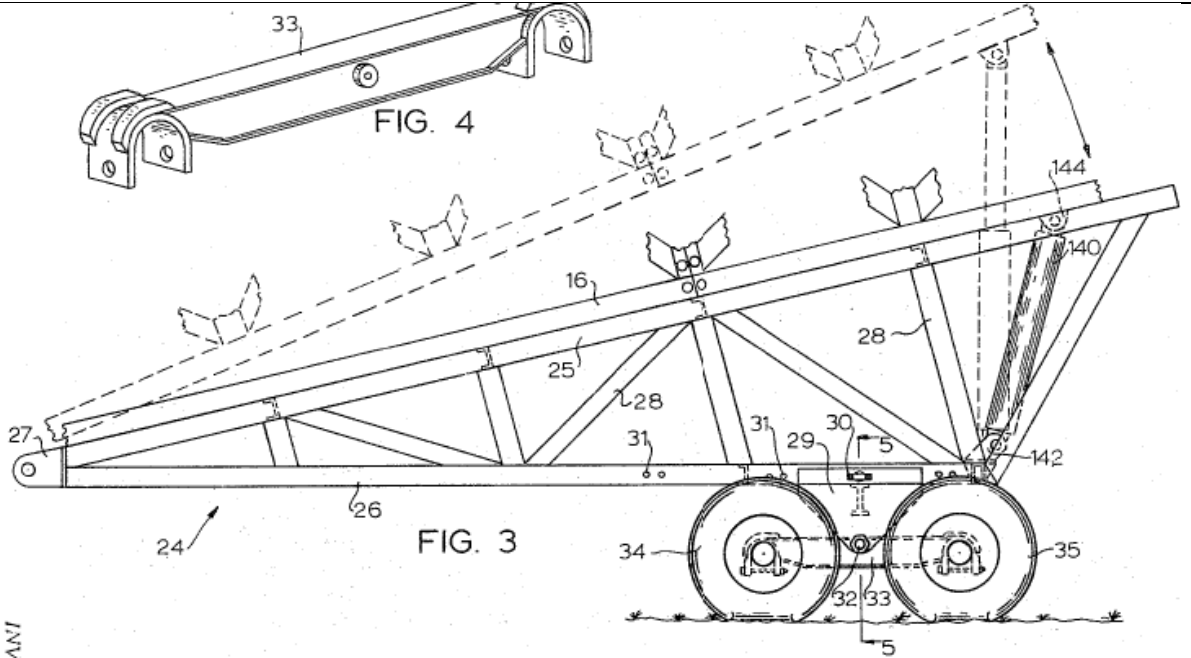
“The conveyor table **16** is mounted for pivotal movement about a horizontal pivot shaft **28** defining a pivot access adjacent the feed end **17a** for upward and downward vertical movement **29** of the forward end **27** of the conveyor table. Actuation of the vertical movement **29** is effected by a hydraulic drive cylinder **30** connected between the frame **20** and the underside of the conveyor table.” ‘861 patent, 2:66-3:5; “means mounting the conveyor table for movement of the

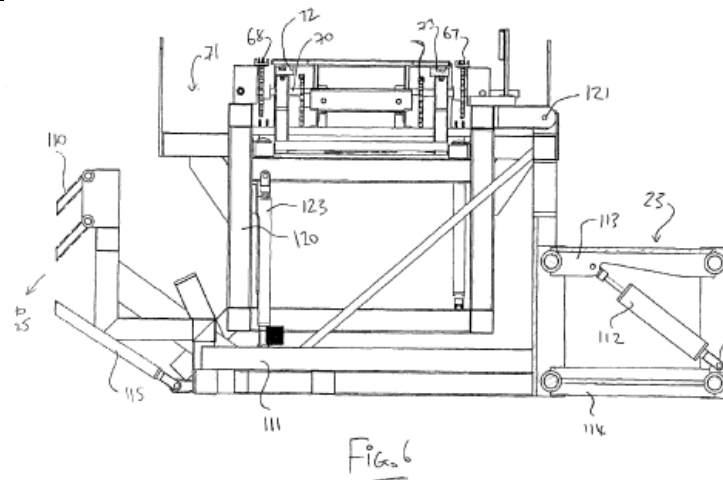
forward end vertically up and down for adjustment of the height of the forward end.” ‘861 patent, 4:38-40.



Ross: “Yet another object of this invention is to provide a rigid undercarriage structure which is pivotally connected to and supports a conveyor frame assembly with hydraulically operated lift cylinders which are adapted to pivotally tilt the conveyor frame relative to the undercarriage structure.” Ross, 1:56-61. Conveyor frame 10 is supported for transportation by means of an undercarriage structure 24. “Undercarriage structure 24 is substantially a rigid frame and is

	<p>comprised of converging beam members 25 and 26 which are joined at a vertex 27 and which are rigidly positioned with respect to each other by means of truss members 28. Vertex 27 is pivotally connected to conveyor frame 10 by pin means 36 so as to adapt conveyor frame 10 to be pivoted upwardly with respect to undercarriage structure 24. Beam member 26 has removably connected thereto a pair of axle support plates 29 which are selectively secured to the same by pins 30. A plurality of holes 31 are transversely spaced through beam member 26 and are adapted to receive pins so that axle support plates 29 may be positioned at most any desired location along the length of beam member 26. Axle support plates 29 mount shaft 32 which pivotally receives walking axle 33. Walking axle 33 in turn has rotatably mounted thereon wheels 34 and 35. By selectively moving axle support plates 29 along the length of beam member 26, undercarriage structure 24 is adapted to balance and to raise and lower conveyor frame 10 for transportation purposes and to provide a strong foundation upon which conveyor frame 10 may reside. Undercarriage structure 24 may be provided with a pair of hydraulic cylinders 140 and 141 which are pivotally connected thereto by means of eyelets 142 and 143, respectively, and are pivotally connected to conveyor frame 10 by means of brackets 144 and 145, respectively (bracket 145 not shown). Hydraulic cylinders 140 and 141 are powered by a hydraulic source, hereinafter described, and are adapted to tilt conveyor frame upwardly relative undercarriage structure 24.” Ross, 3:46-4:3.</p>
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	 <p>FIG. 3</p> <p>FIG. 4</p> <p>BY Walter E. R Shirley L. K /s/</p>
<p>Claim 4</p>	
<p>The apparatus of claim 1 wherein the stacking assembly further includes a pivoting arrangement for tilting the stacking assembly relative to the chassis to provide for substantial leveling of the stacking assembly when operating on uneven ground surfaces.</p>	<p>“[T]he stacking section included in the conveyor 66 and the stacking arms on the vertical conveyor of the stacking assembly is mounted on a subframe section 120 separate from the frame section 111 and pivotally connected to the frame section 111 on a pivot pin 121. The height of the stacking section relative to the frame section 111 can be adjusted by a cylinder 123 under control of the operator standing on the frame 71. Thus the stacking section can be maintained substantially horizontal relative to a front to rear direction by pivoting action about the horizontal transverse pivot pin 121.” McLeod/Pisony, p. 24, l-p. 25, l. 6.</p>



“The apparatus of claim 11 wherein the stacking assembly and the bundling assembly are mounted on a sub-frame portion of the frame which is arranged for pivotal movement relative to the frame and relative to the conveyor about a horizontal axis transverse to the direction of the movement of the vehicle to maintain the stacking assembly and bundling assembly substantially level as the vehicle moves.” McLeod/Pisony, p. 31, ll. 11-16.

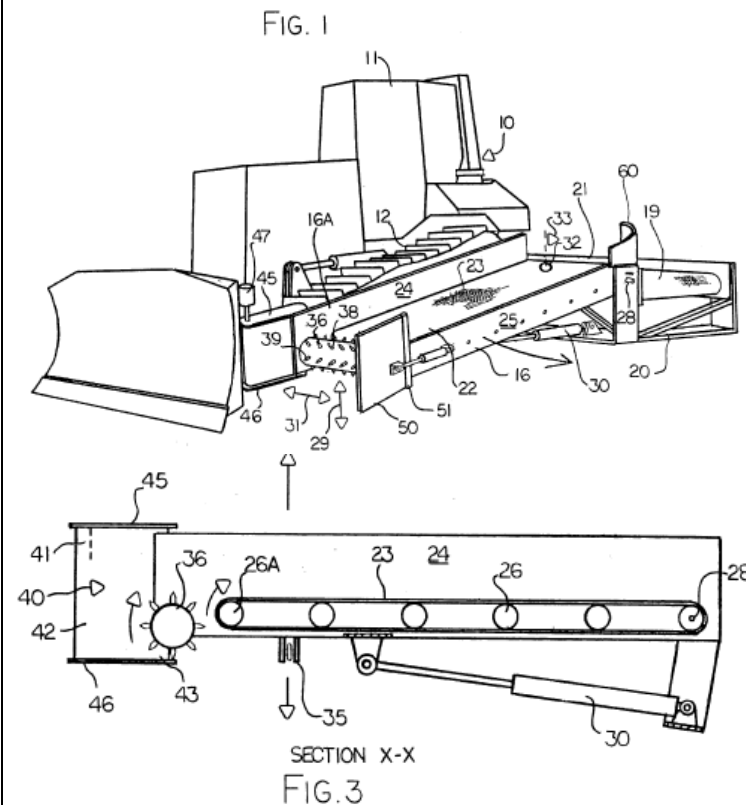
Claim 6

The apparatus of claim 1 wherein the mast includes a hydraulic cylinder drivable to telescope to various lengths.

“In U.S. Pat. No. 5,934,861 issued Aug. 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2.241.682 published 26th Feb. 1999, a first proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisony, p. 2, ll. 10-16.

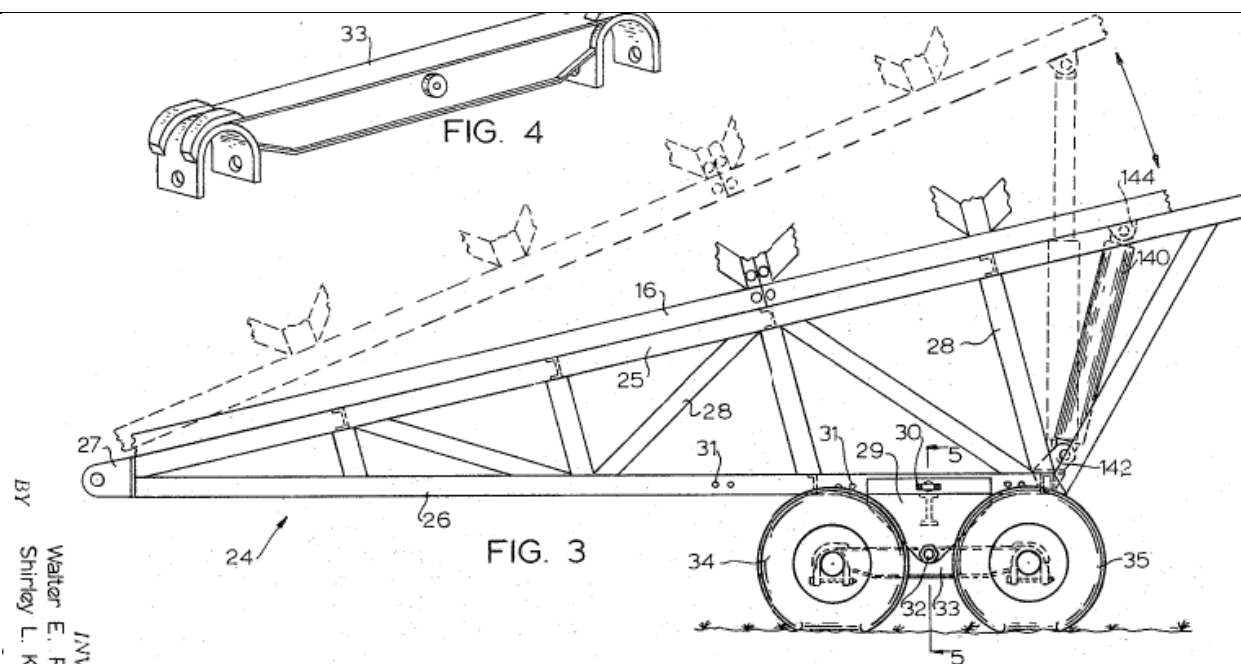
“The conveyor table **16** is mounted for pivotal movement about a horizontal pivot shaft **28** defining a pivot access adjacent the feed end **17a** for upward and downward vertical movement **29** of the forward end **27** of the conveyor table. Actuation of the vertical movement **29** is effected by a hydraulic drive cylinder **30** connected between the frame **20** and the underside of the conveyor table.” ‘861 patent, 2:66-3:5; “means mounting the conveyor table for movement of the forward end vertically up and down for adjustment of the height of the forward end.” ‘861

patent, 4:38-40;



Ross: “Yet another object of this invention is to provide a rigid undercarriage structure which is pivotally connected to and supports a conveyor frame assembly with hydraulically operated lift cylinders which are adapted to pivotally tilt the conveyor frame relative to the undercarriage structure.” Ross, 1:56-61. Conveyor frame 10 is supported for transportation by means of an undercarriage structure 24. “Undercarriage structure 24 is substantially a rigid frame and is comprised of converging beam members 25 and 26 which are joined at a vertex 27 and which are

	<p>rigidly positioned with respect to each other by means of truss members 28. Vertex 27 is pivotally connected to conveyor frame 10 by pin means 36 so as to adapt conveyor frame 10 to be pivoted upwardly with respect to undercarriage structure 24. Beam member 26 has removably connected thereto a pair of axle support plates 29 which are selectively secured to the same by pins 30. A plurality of holes 31 are transversely spaced through beam member 26 and are adapted to receive pins so that axle support plates 29 may be positioned at most any desired location along the length of beam member 26. Axle support plates 29 mount shaft 32 which pivotally receives walking axle 33. Walking axle 33 in turn has rotatably mounted thereon wheels 34 and 35. By selectively moving axle support plates 29 along the length of beam member 26, undercarriage structure 24 is adapted to balance and to raise and lower conveyor frame 10 for transportation purposes and to provide a strong foundation upon which conveyor frame 10 may reside. Undercarriage structure 24 may be provided with a pair of hydraulic cylinders 140 and 141 which are pivotally connected thereto by means of eyelets 142 and 143, respectively, and are pivotally connected to conveyor frame 10 by means of brackets 144 and 145, respectively (bracket 145 not shown). Hydraulic cylinders 140 and 141 are powered by a hydraulic source, hereinafter described, and are adapted to tilt conveyor frame upwardly relative to undercarriage structure 24.” Ross, 3:46-4:3.</p>
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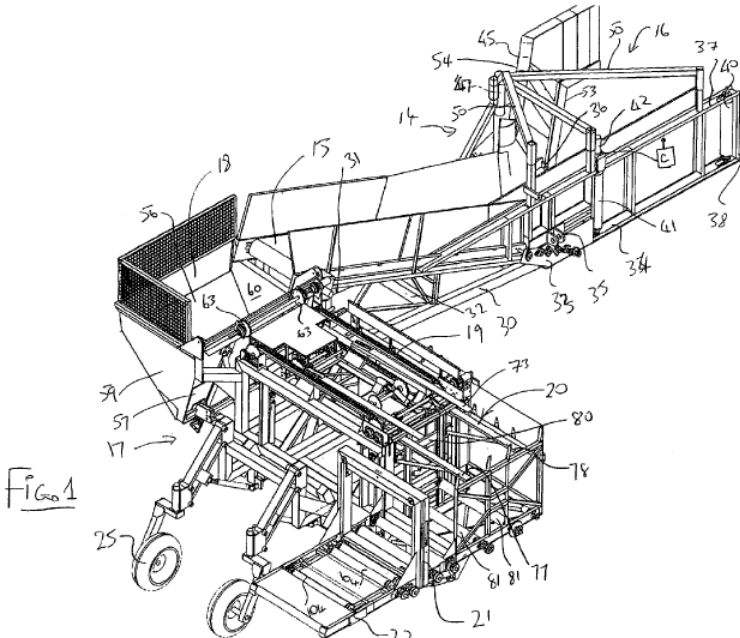


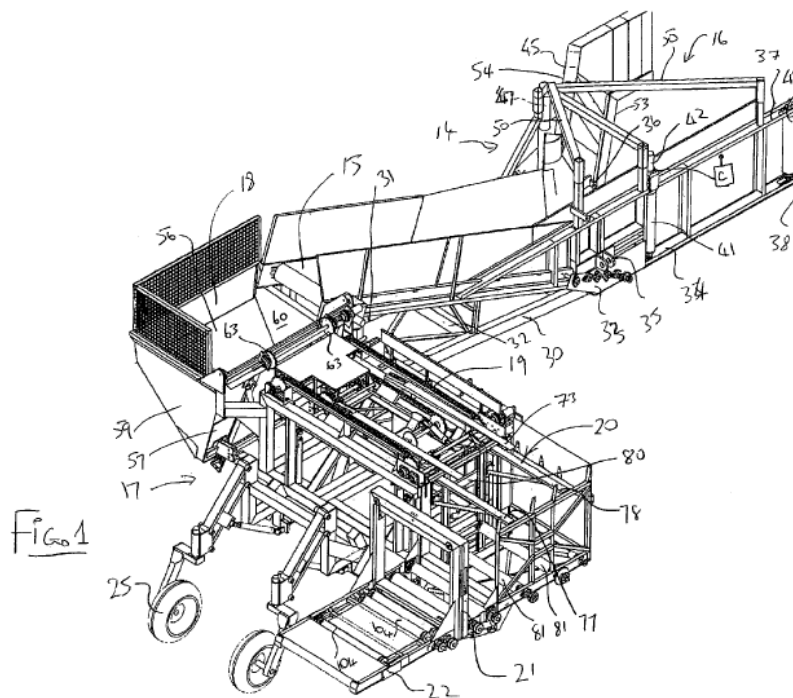
INVENTOR
Walter E. R
Shirley L. K
BY

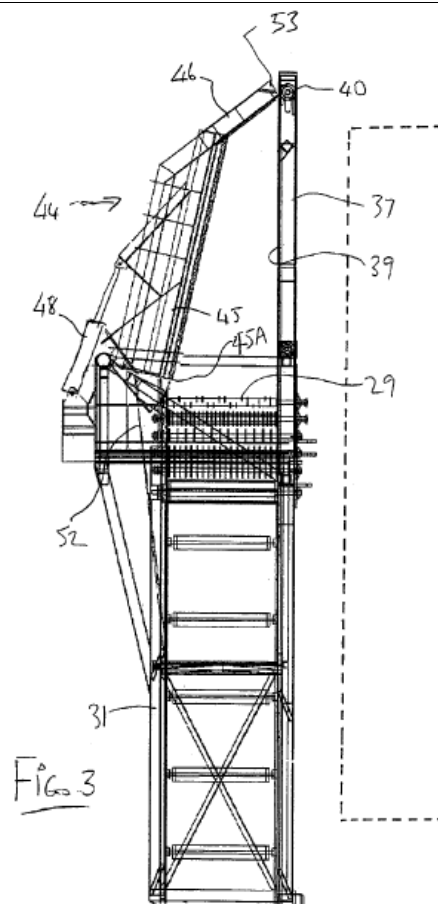
EXHIBIT F

Invalidity Contentions Claim Chart for U.S. Patent No. 7,591,629
Claims 1, 2, 4 and 6 in view of McLeod/Pisony and Knerr under 35 U.S.C. § 103

Claim 1	McLeod/Pisony and Knerr
An apparatus for picking up, stacking and bundling lumber, comprising:	The preamble is not a limitation. However, to the extent it could be construed to be a limitation, the '202 patent discloses an apparatus for picking up, stacking and bundling lumber": "[a]n apparatus for picking, conveying, stacking and bundling lumber pieces from the grounds ..." McLeod/Pisony, Abstract (57)
(a) a chassis,	"The elements provided by the picking and conveyer assembly 14 , the stacking assembly 17 and the bundling assembly 21 are all mounted on a frame for common movement with the vehicle 10 in the working direction 13 . The frame carrying these elements is attached to the vehicle by a four point hitch 23 at the rear of the vehicle and by coupling assembly generally indicated at 24 at the side of the vehicle and inwardly of the picking and conveyer assembly 14 . McLeod/Pisony, p. 11, l. 23-p. 12, l. 3.

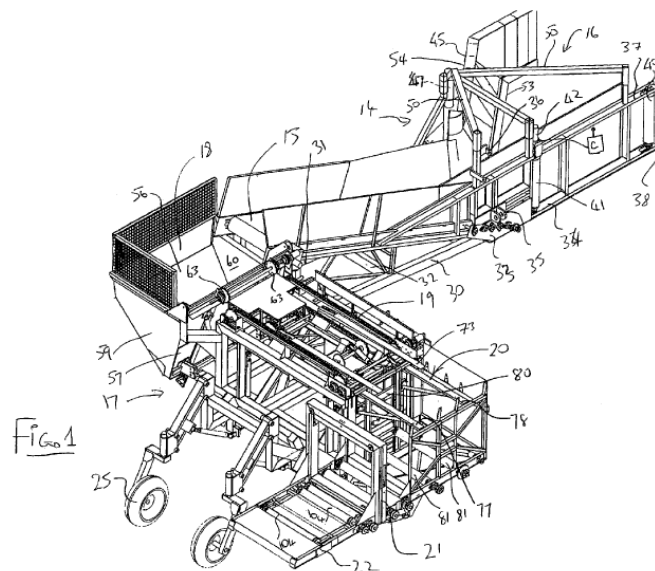
	
(b) a grapple carried with the chassis,	<p>“Such an arrangement can also be used with a picking assembly in the form of a mechanically operated grapple which lifts the pieces from a large pile of the pieces for formation into stacks which are bundled and discharged. Again therefore this device in combination with a grapple type picking assembly is portable on a suitable trailer or frame carried by a vehicle so that it can be moved to a pile or collection of the piecing for stacking.” ‘McLeod/Pisomy, p. 13, ll. 2-7.</p>
(c) a conveyor assembly supported on the chassis,	<p>“The apparatus further includes a picking and conveyer assembly 14 having a main conveyer 15 attached to and arranged rearwardly of a picker 16.” ‘202 patent, 4:45-47. The elements provided by the picking and conveyer assembly 14, the stacking assembly 17 and the bundling assembly 21 are all mounted on a frame for common movement with the vehicle 10 in the working direction 13. McLeod/Pisomy, p. 11, ll. 18-25.</p>

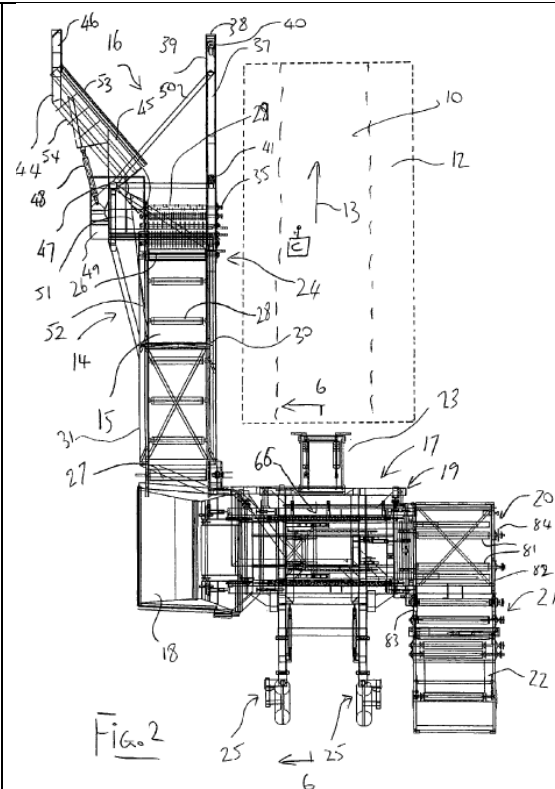




(d)) a stacking assembly operatively connected adjacent the conveyor assembly, the stacking assembly including an unscrambling hopper, a row conveyor, a stacking bin and a bundling assembly, and,

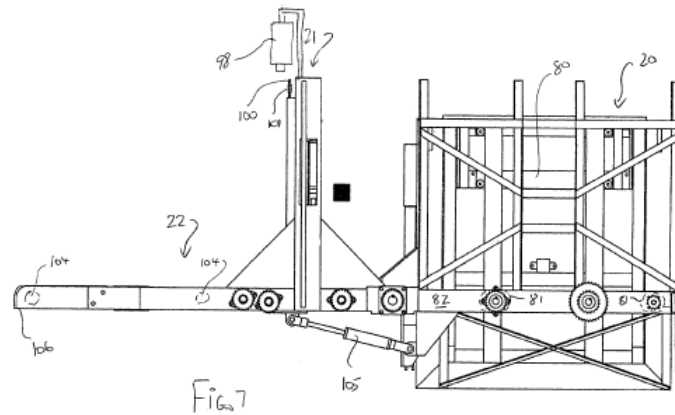
“At the rear of the conveyor **15** is provided a stacking assembly **14** generally indicated at **17** including an unscrambling hopper **18**, a row conveyor **19** and a stacking assembly **20**. The apparatus further including a bundling assembly **21** including a discharge ramp **22**.” ‘202 patent, 4:47-52. The elements provided by the picking and conveyor assembly **14**, the stacking assembly **17** and the bundling assembly **21** are all mounted on a frame for common movement with the vehicle **10** in the working direction **13**. McLeod/Pisony, p. 11, ll. 19-25.





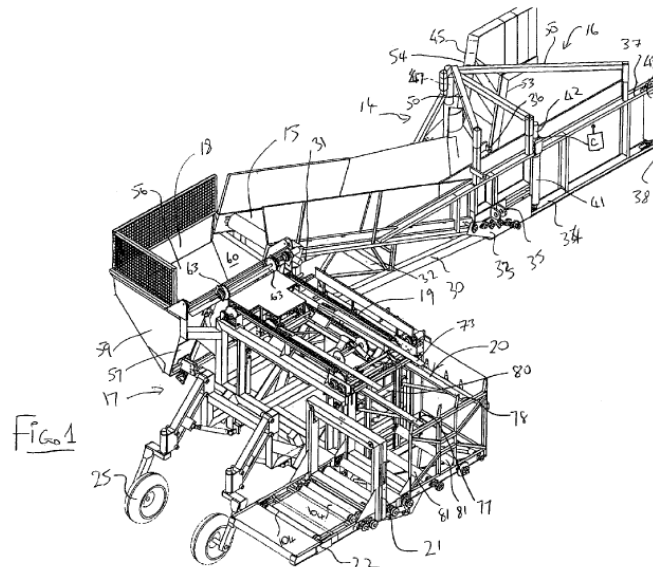
(e) a discharge platform operatively connected adjacent the bundling assembly,

The apparatus further including a bundling assembly **21** including a discharge ramp **22**.” McLeod/Pisony, p. 11, ll. 22-23.



(f) wherein the conveyor assembly includes a frame,

“The conveyor is mounted on a frame section of the main frame having a first side **30** and a second side **31**. McLeod/Pisomy, p. 14, ll. 10-12.

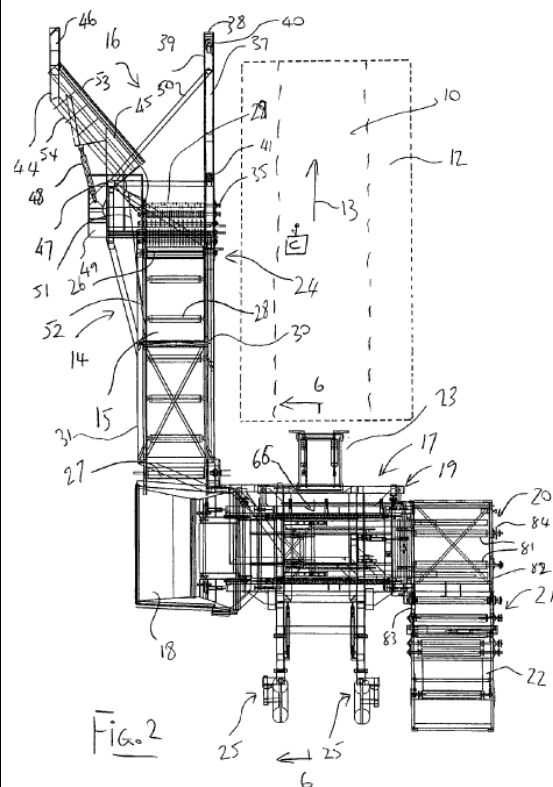


a pivotal connection for the frame to permit angular

“The side wall **30** includes mounting lugs **35** and **36** for receiving support elements of a coupling **24** which connects the side of the vehicle to the sidewall **30**. The coupling element **24**

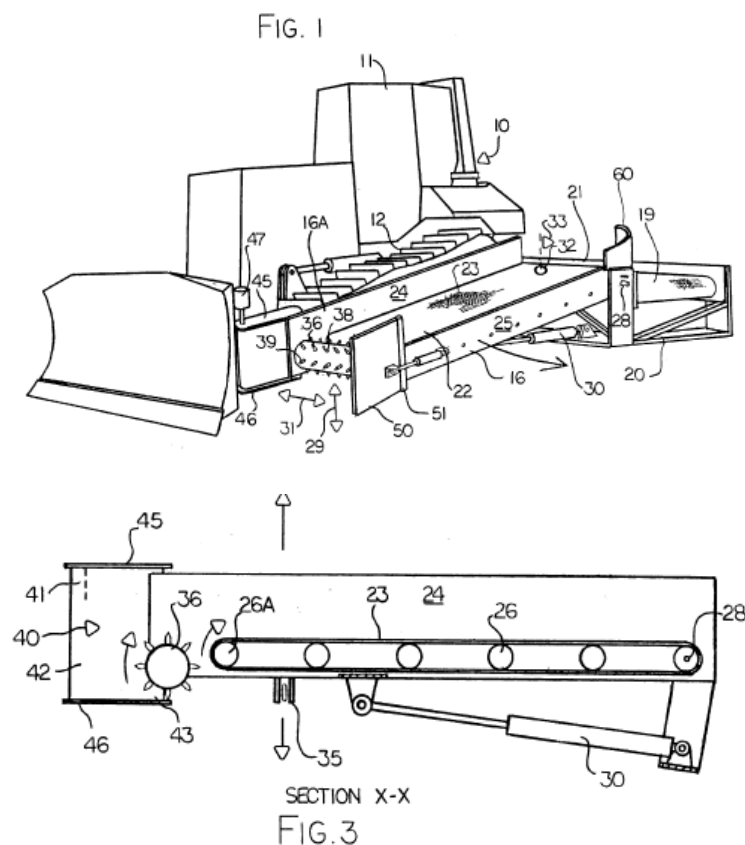
adjustment of the frame relative to the chassis,

includes a link which allows the frame to pivot inwardly and outwardly about a horizontal axis parallel to the direction **13** so that the picking section can pivot outwardly and upwardly or outwardly and downwardly to accommodate changes in ground contour. In addition to the angle of the bottom skid **34** about a horizontal pivot axis transverse to the direction **13** can be changed by actuating the four point hitch connection **23** and/or by lifting the linkage **24**.”
McLeod/Pisony, p. 14, ll. 19-25.



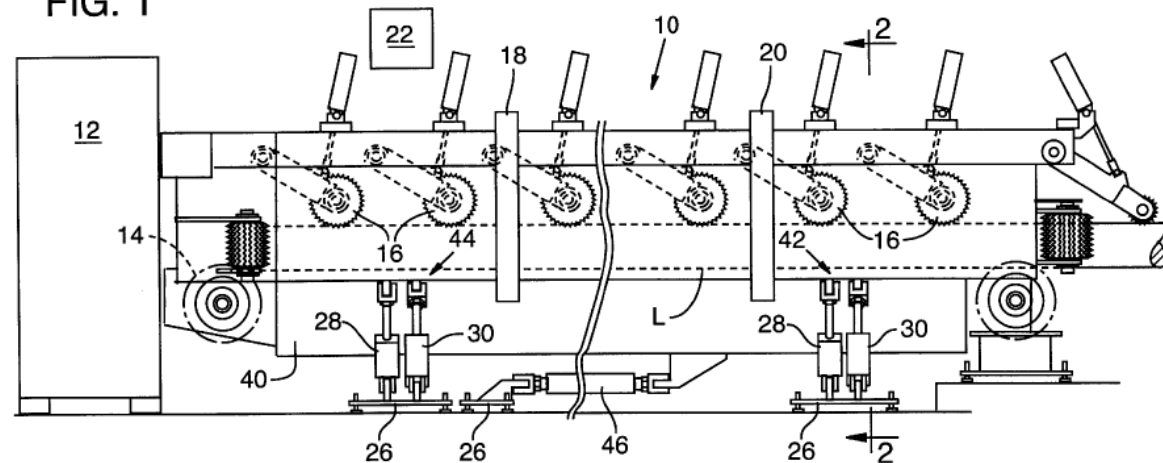
“In US patent 5934861 issued August 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2241682 published 26th February 1999, a first proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used

herein and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisony, p. 2, ll. 10-16. “The conveyer table **16** is mounted for pivotal movement about a horizontal pivot shaft **28** defining a pivot access adjacent the feed end **17a** for upward and downward vertical movement **29** of the forward end **27** of the conveyer table. Actuation of the vertical movement **29** is effected by a hydraulic drive cylinder **30** connected between the frame **20** and the underside of the conveyer table.” ‘861 patent, 2:66-3:5; “means mounting the conveyor table for movement of the forward end vertically up and down for adjustment of the height of the forward end.” ‘861 patent, 4:38-40.



Knerr: “In the preferred embodiment of the present invention, the support assemblies for the conveyor bed include mechanism for independently raising and lowering the leading or trailing end of the conveyor bed and thus the log being conveyed and for independently side shifting the leading or trailing end of the conveyor.” Knerr, 1:47-52. “The two cylinders are anchored to a stationary base at opposed sides of the conveyor bed and extend angularly in a cross over relation to a movable conveyor support at opposite sides of the bed.” Knerr, 1:56-61. “The conveyor is provided with a pivotal mounting as between the conveyor bed and the stationary bases in that the conveyor bed is not simply side shifted and elevated but is angularly shifted relative to the bases.” Knerr, 2:6-9.

FIG. 1



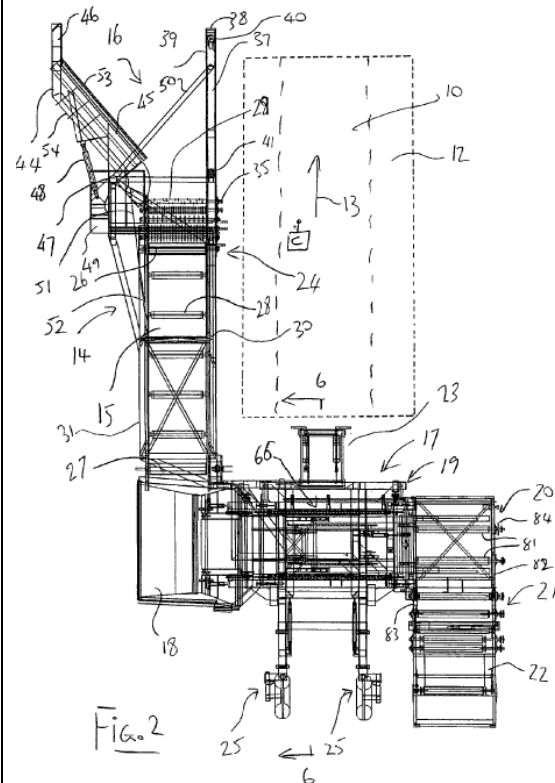
an extendible mast
connected between the
frame and the chassis to
drive the frame about the

“The side wall **30** includes mounting lugs **35** and **36** for receiving support elements of a coupling **24** which connects the side of the vehicle to the sidewall **30**. The coupling element **24** includes a link which allows the frame to pivot inwardly and outwardly about a horizontal axis parallel to the direction **13** so that the picking section can pivot outwardly and upwardly or

pivotal connection

outwardly and downwardly to accommodate changes in ground contour. In addition to the angle of the bottom skid **34** about a horizontal pivot axis transverse to the direction **13** can be changed by actuating the four point hitch connection **23** and/or by lifting the linkage **24**.”

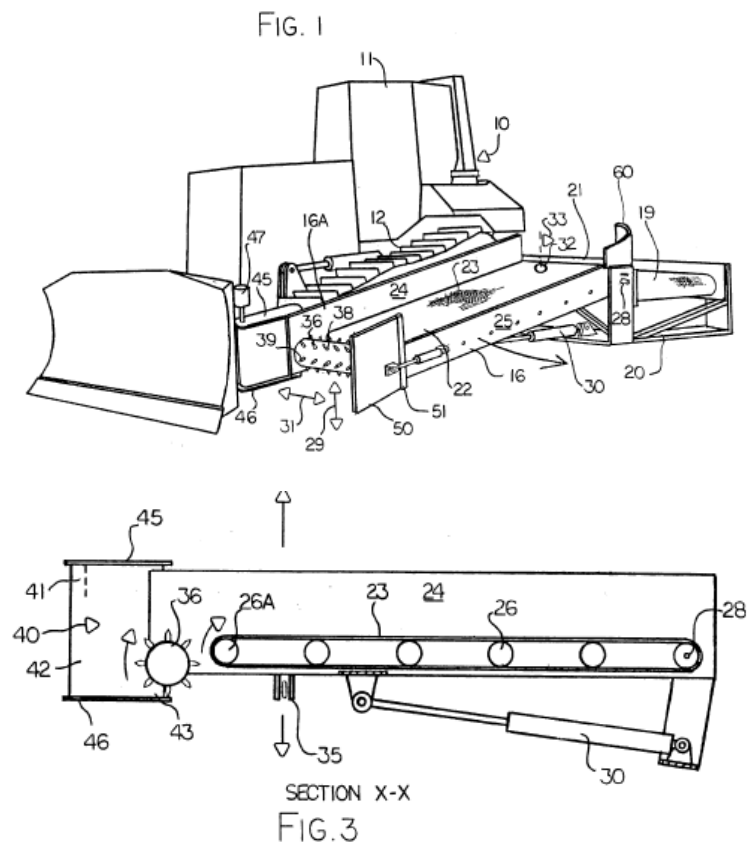
McLeod/Pisony, p. 14, ll. 17-25.



“In U.S. Pat. No. 5,934,861 issued Aug. 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2.241.682 published 26th Feb. 1999, a first proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisony, p. 2, ll. 10-16.

“The conveyor table **16** is mounted for pivotal movement about a horizontal pivot shaft **28**

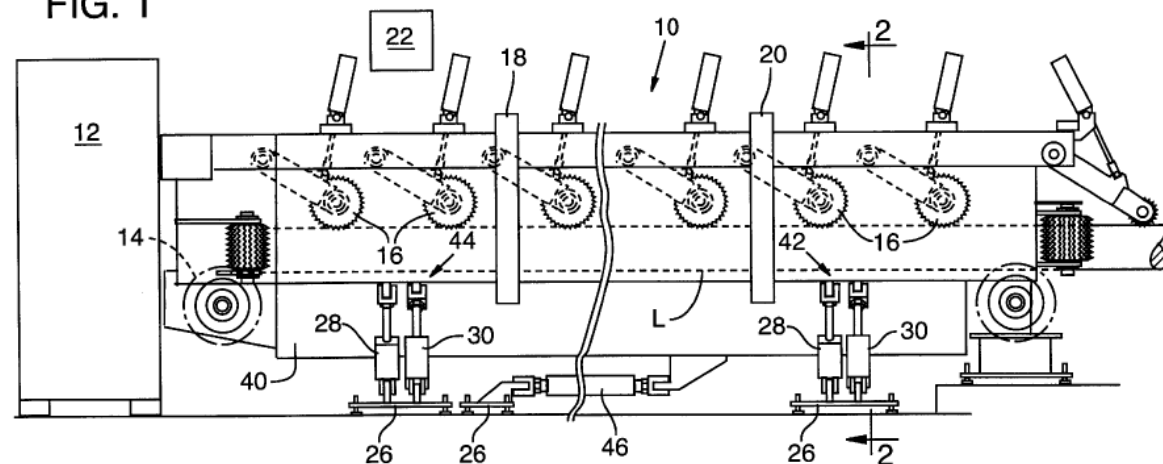
defining a pivot access adjacent the feed end **17a** for upward and downward vertical movement **29** of the forward end **27** of the conveyor table. Actuation of the vertical movement **29** is effected by a hydraulic drive cylinder **30** connected between the frame **20** and the underside of the conveyor table.” ‘861 patent, 2:66-3:5; “means mounting the conveyor table for movement of the forward end vertically up and down for adjustment of the height of the forward end.” ‘861 patent, 4:38-40.



Knerr: “In the preferred embodiment of the present invention, the support assemblies for the conveyor bed include mechanism for independently raising and lowering the leading or trailing

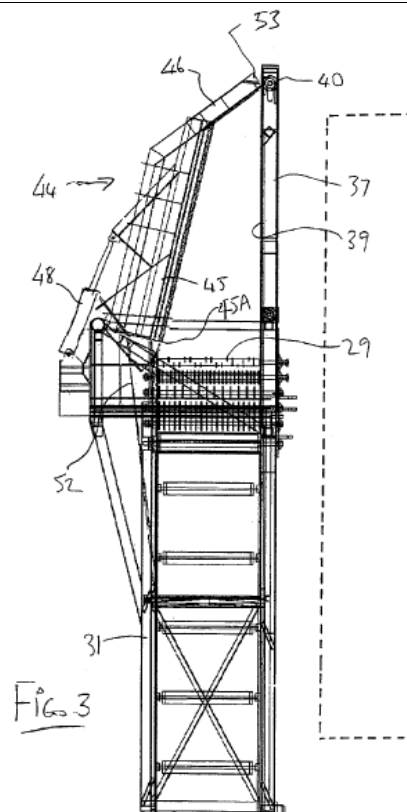
end of the conveyor bed and thus the log being conveyed and for independently side shifting the leading or trailing end of the conveyor.” Knerr, 1:47-52. “The two cylinders are anchored to a stationary base at opposed sides of the conveyor bed and extend angularly in a cross over relation to a movable conveyor support at opposite sides of the bed.” Knerr, 1:56-61. “The conveyor is provided with a pivotal mounting as between the conveyor bed and the stationary bases in that the conveyor bed is not simply side shifted and elevated but is angularly shifted relative to the bases.” Knerr, 2:6-9.

FIG. 1



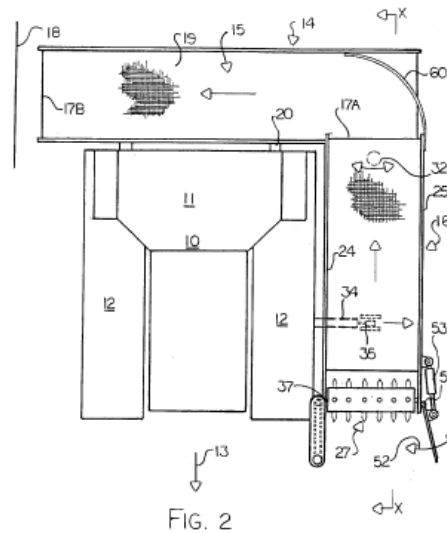
and a receiving bin and a conveyor carried on the frame,

“The conveyor **15** includes a conveyor belt having a forward end **26** and a rear end **27** and is mounted on a plurality of support rollers **28** so that an upper run of the belt carries the pieces rearwardly and upwardly from the forward end **26** into the unscrambling hopper **18** at the rear end **27**.” McLeod/Pisony, p. 13, ll. 8-11. “In front of the conveyor belt is provided a plurality of picking rollers **28** arranged in a row in front of the front roller of the conveyor. ... The front picking rollers therefore act to lift the pieces off the ground or in some cases out of embedded position within the ground by the spikes of the disc engaging in the pieces and lifting them upwardly onto the top of the rollers for movement rearwardly onto the conveyor.” McLeod/Pisony, p. 13, l. 12-p. 14, l. 9.



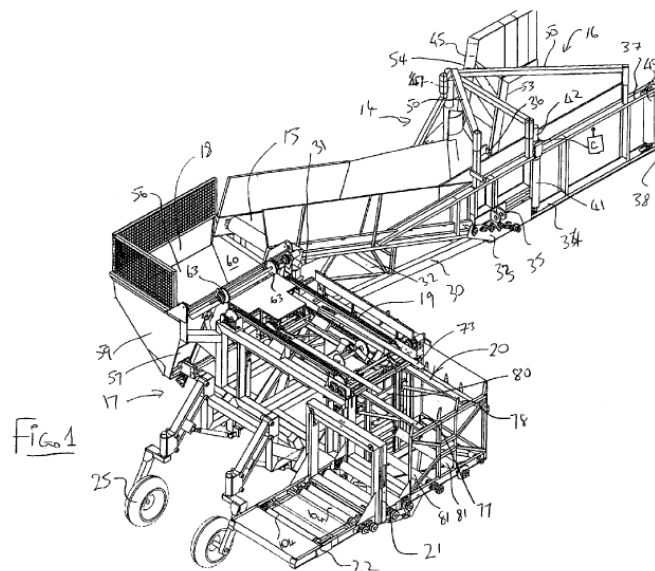
“In U.S. Pat. No. 5,934,861 issued Aug. 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2.241.682 published 26th Feb. 1999, a first proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisony, p. 2, ll. 10-16. “The vehicle carries a picking and conveying system generally indicated at **14** including a main conveyor **15** and a conveyor table **16** feeding the main conveyor **15**. The main conveyor is mounted behind cab **11** of the vehicle from the feed end **16a** of the conveyor to a discharge end **17** of conveyor ...” ‘861 patent, 2:48-53. “The conveyor table includes a conveyor section **22**

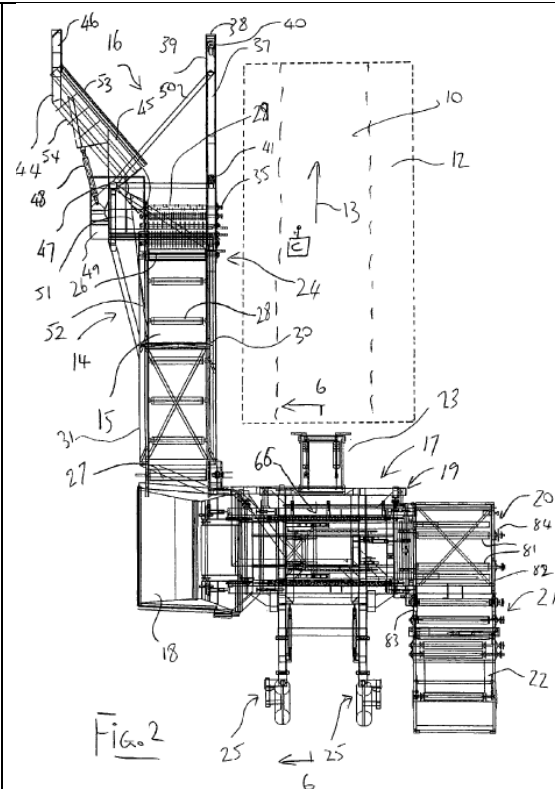
having a side belt **23** ...” ‘861 patent, 2:58-60.



the conveyor positioned between the receiving bin and the stacking assembly and being operable to move lumber from the receiving bin to the stacking assembly

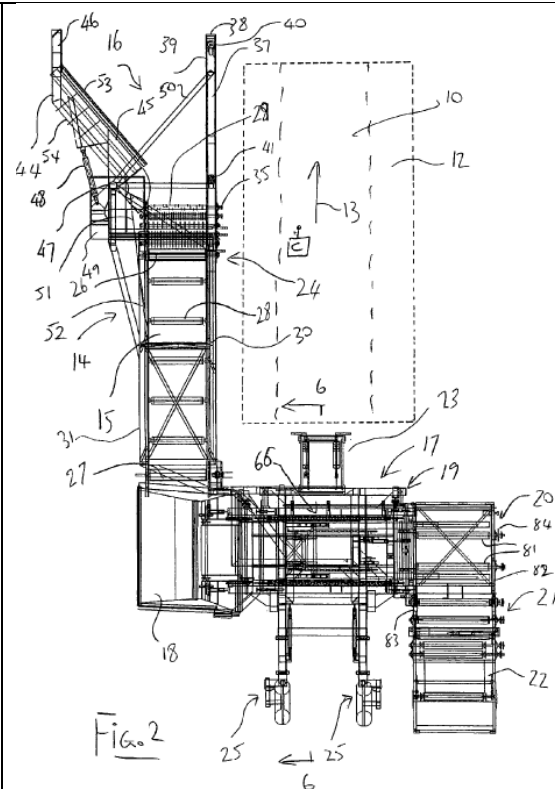
“The conveyor **15** includes a conveyor belt having a forward end **26** and a rear end **27** and is mounted on a plurality of support rollers **28** so that an upper run of the belt carries the pieces rearwardly and upwardly from the forward end **26** into the unscrambling hopper **18** at the rear end **27**.” McLeod/Pisony, p. 13, ll. 8-11





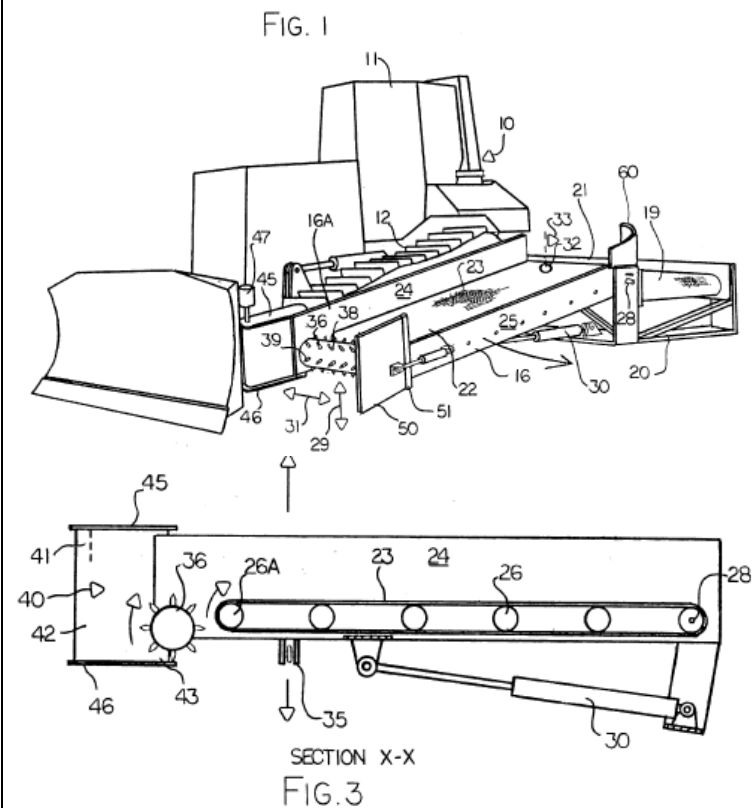
and the mast being operable to drive adjustment of the angle of the frame relative to the chassis to select the approach angle for the conveyor relative to the stacking assembly.

“The side wall **30** includes mounting lugs **35** and **36** for receiving support elements of a coupling **24** which connects the side of the vehicle to the sidewall **30**. The coupling element **24** includes a link which allows the frame to pivot inwardly and outwardly about a horizontal axis parallel to the direction **13** so that the picking section can pivot outwardly and upwardly or outwardly and downwardly to accommodate changes in ground contour. In addition to the angle of the bottom skid **34** about a horizontal pivot axis transverse to the direction **13** can be changed by actuating the four point hitch connection **23** and/or by lifting the linkage **24**.”
 ‘McLeod/Pisony, p. 14ll. 17-25



“In U.S. Pat. No. 5,934,861 issued Aug. 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2.241.682 published 26th Feb. 1999, a first proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisony, p. 2, ll. 10-16. “The conveyor table **16** is mounted for pivotal movement about a horizontal pivot shaft **28** defining a pivot access adjacent the feed end **17a** for upward and downward vertical movement **29** of the forward end **27** of the conveyor table. Actuation of the vertical movement **29** is effected by a hydraulic drive cylinder **30** connected between the frame **20** and the underside of the conveyor table.” ‘861 patent, 2:66-3:5; “means mounting the conveyor table for movement

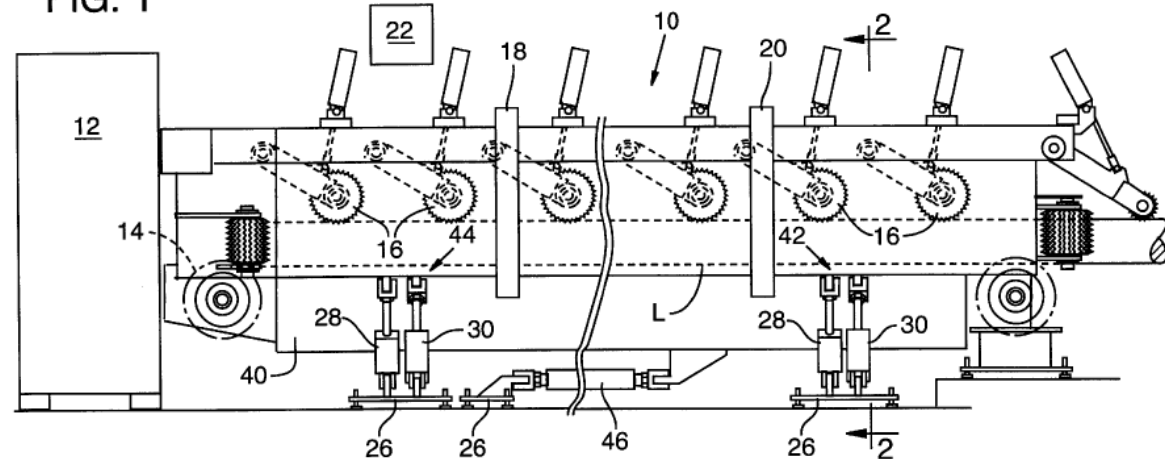
of the forward end vertically up and down for adjustment of the height of the forward end.” ‘861 patent, 4:38-40.



Knerr: “In the preferred embodiment of the present invention, the support assemblies for the conveyor bed include mechanism for independently raising and lowering the leading or trailing end of the conveyor bed and thus the log being conveyed and for independently side shifting the leading or trailing end of the conveyor.” Knerr, 1:47-52. “The two cylinders are anchored to a stationary base at opposed sides of the conveyor bed and extend angularly in a cross over relation to a movable conveyor support at opposite sides of the bed.” Knerr, 1:56-61. “The

conveyor is provided with a pivotal mounting as between the conveyor bed and the stationary bases in that the conveyor bed is not simply side shifted and elevated but is angularly shifted relative to the bases.” Knerr, 2:6-9.

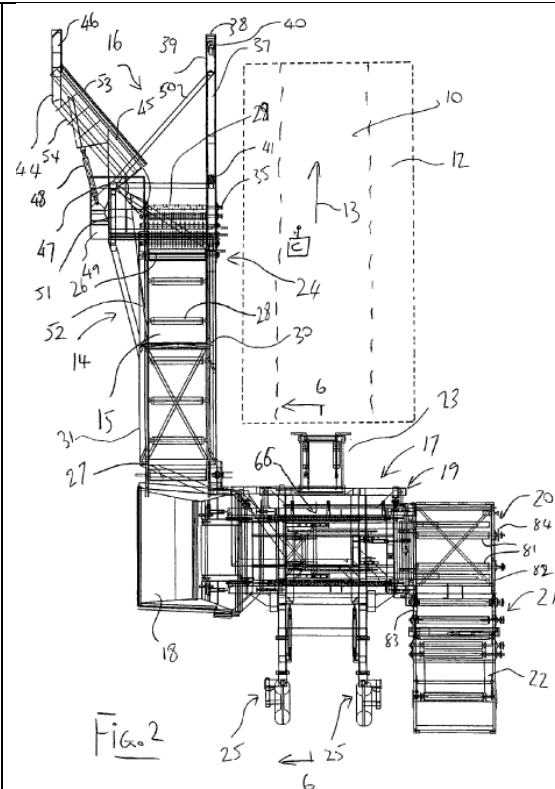
FIG. 1



Claim 2

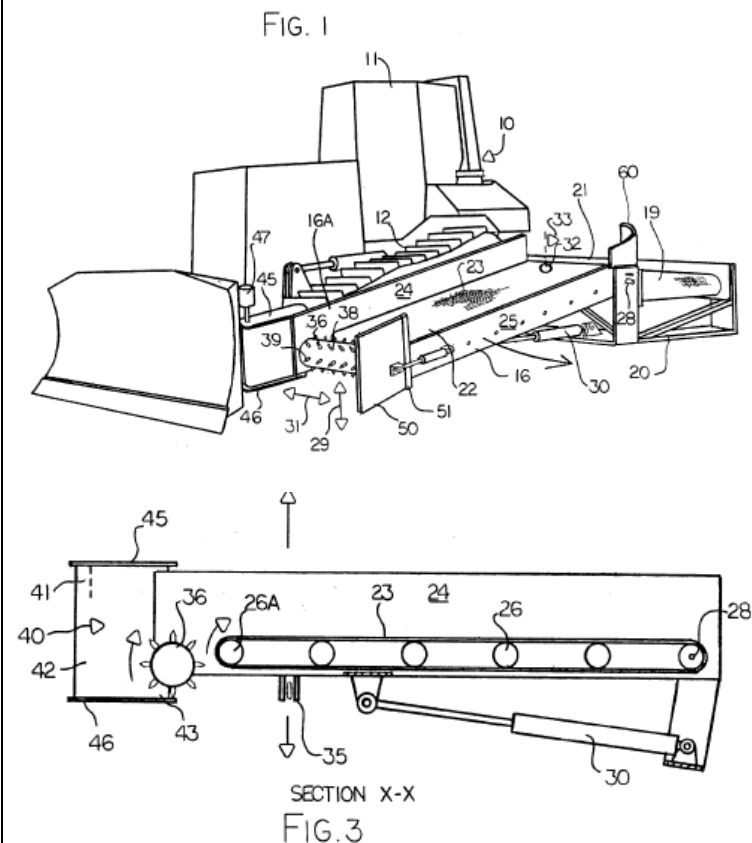
The apparatus of claim 1 wherein the mast drives the frame adjacent the receiving bin to select a spacing between the frame and the chassis.

“The side wall **30** includes mounting lugs **35** and **36** for receiving support elements of a coupling **24** which connects the side of the vehicle to the sidewall **30**. The coupling element **24** includes a link which allows the frame to pivot inwardly and outwardly about a horizontal axis parallel to the direction **13** so that the picking section can pivot outwardly and upwardly or outwardly and downwardly to accommodate changes in ground contour. In addition to the angle of the bottom skid **34** about a horizontal pivot axis transverse to the direction **13** can be changed by actuating the four point hitch connection **23** and/or by lifting the linkage **24**.” McLeod/Pisomy, p. 14, 17-25.



“In U.S. Pat. No. 5,934,861 issued Aug. 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2.241.682 published 26th Feb. 1999, a first proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisony, p. 2, ll. 10-16. “The conveyor table **16** is mounted for pivotal movement about a horizontal pivot shaft **28** defining a pivot access adjacent the feed end **17a** for upward and downward vertical movement **29** of the forward end **27** of the conveyor table. Actuation of the vertical movement **29** is effected by a hydraulic drive cylinder **30** connected between the frame **20** and the underside of the conveyor table.” ‘861 patent, 2:66-3:5; “means mounting the conveyor table for movement

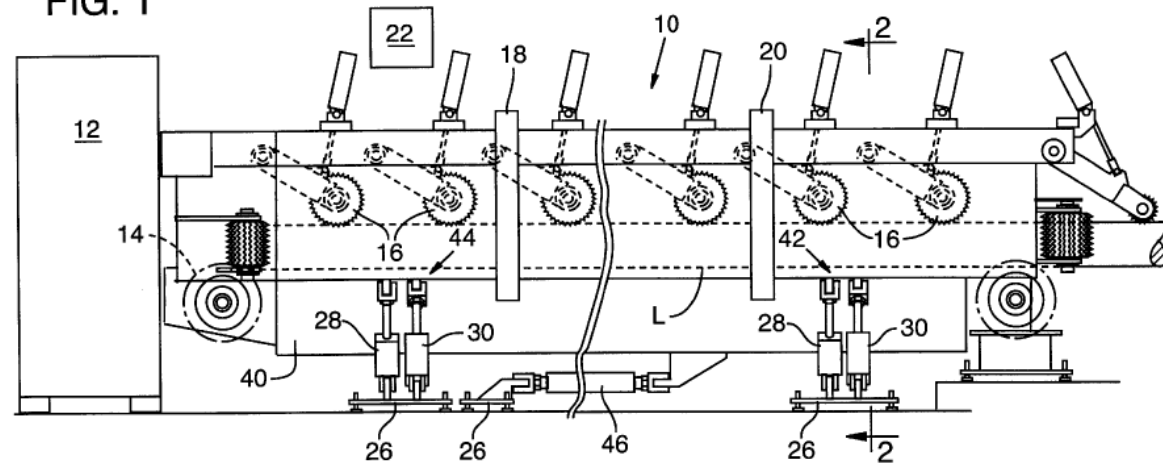
of the forward end vertically up and down for adjustment of the height of the forward end.” ‘861 patent, 4:38-40.



Knerr: “In the preferred embodiment of the present invention, the support assemblies for the conveyor bed include mechanism for independently raising and lowering the leading or trailing end of the conveyor bed and thus the log being conveyed and for independently side shifting the leading or trailing end of the conveyor.” Knerr, 1:47-52. “The two cylinders are anchored to a stationary base at opposed sides of the conveyor bed and extend angularly in a cross over relation to a movable conveyor support at opposite sides of the bed.” Knerr, 1:56-61. “The

conveyor is provided with a pivotal mounting as between the conveyor bed and the stationary bases in that the conveyor bed is not simply side shifted and elevated but is angularly shifted relative to the bases.” Knerr, 2:6-9.

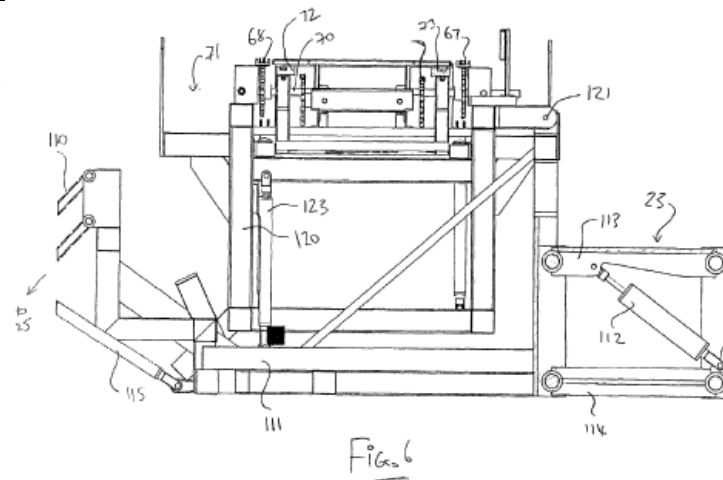
FIG. 1



Claim 4

The apparatus of claim 1 wherein the stacking assembly further includes a pivoting arrangement for tilting the stacking assembly relative to the chassis to provide for substantial leveling of the stacking assembly when operating on uneven ground surfaces.

“[T]he stacking section included in the conveyor **66** and the stacking arms on the vertical conveyer of the stacking assembly is mounted on a subframe section **120** separate from the frame section **111** and pivotally connected to the frame section **111** on a pivot pin **121**. The height of the stacking section relative to the frame section **111** can be adjusted by a cylinder **123** under control of the operator standing on the frame **71**. Thus the stacking section can be maintained substantially horizontal relative to a front to rear direction by pivoting action about the horizontal transverse pivot pin **121**.” McLeod/Pisony, p. 24, l-p. 25, l. 6.



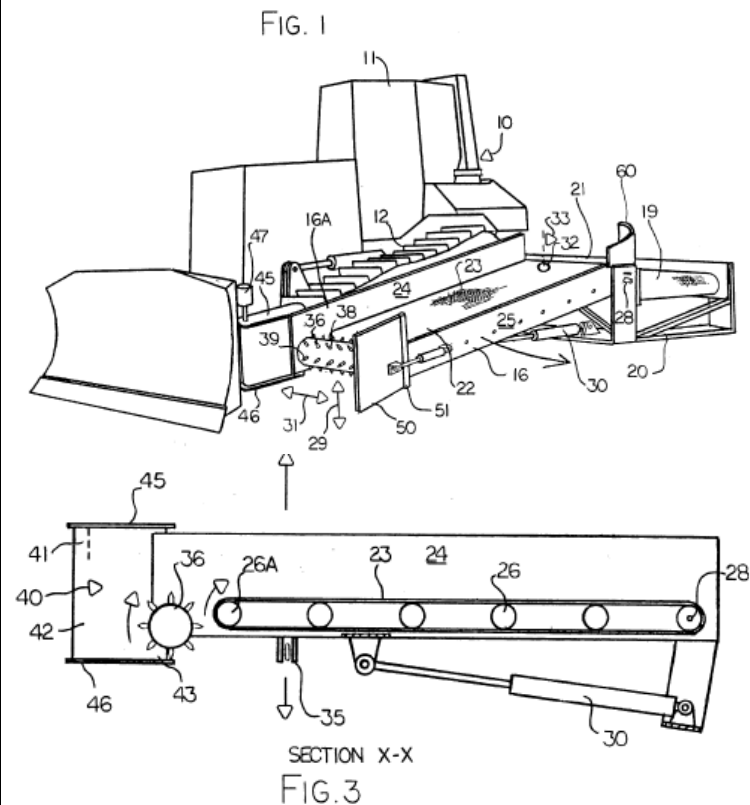
“The apparatus of claim 11 wherein the stacking assembly and the bundling assembly are mounted on a sub-frame portion of the frame which is arranged for pivotal movement relative to the frame and relative to the conveyor about a horizontal axis transverse to the direction of the movement of the vehicle to maintain the stacking assembly and bundling assembly substantially level as the vehicle moves.” McLeod/Pisony, p. 31, ll. 11-16.

Claim 6

The apparatus of claim 1 wherein the mast includes a hydraulic cylinder drivable to telescope to various lengths.

“In U.S. Pat. No. 5,934,861 issued Aug. 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2.241.682 published 26th Feb. 1999, a first proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisony, p. 2, ll. 10-16. “The conveyor table **16** is mounted for pivotal movement about a horizontal pivot shaft **28** defining a pivot access adjacent the feed end **17a** for upward and downward vertical movement **29** of the forward end **27** of the conveyor table. Actuation of the vertical movement **29** is effected by a hydraulic drive cylinder **30** connected between the frame **20** and the underside of the conveyor table.” ‘861 patent, 2:66-3:5; “means mounting the conveyor table for movement of the forward end vertically up and down for adjustment of the height of the forward end.”

'861 patent, 4:38-40;



Knerr: “In the preferred embodiment of the present invention, the support assemblies for the conveyor bed include mechanism for independently raising and lowering the leading or trailing end of the conveyor bed and thus the log being conveyed and for independently side shifting the leading or trailing end of the conveyor.” Knerr, 1:47-52. “The two cylinders are anchored to a stationary base at opposed sides of the conveyor bed and extend angularly in a cross over relation to a movable conveyor support at opposite sides of the bed.” Knerr, 1:56-61. “The conveyor is provided with a pivotal mounting as between the conveyor bed and the stationary

bases in that the conveyor bed is not simply side shifted and elevated but is angularly shifted relative to the bases.” Knerr, 2:6-9.

FIG. 1

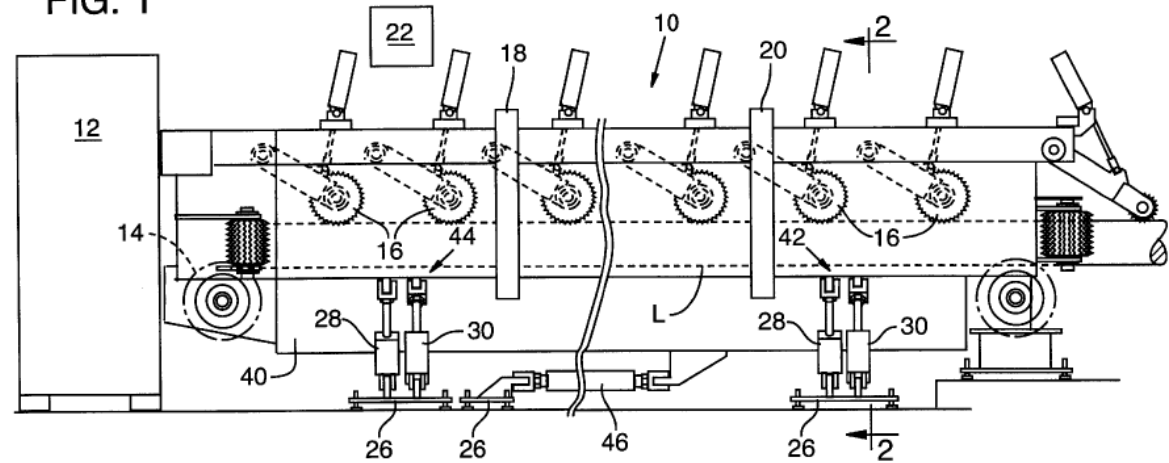
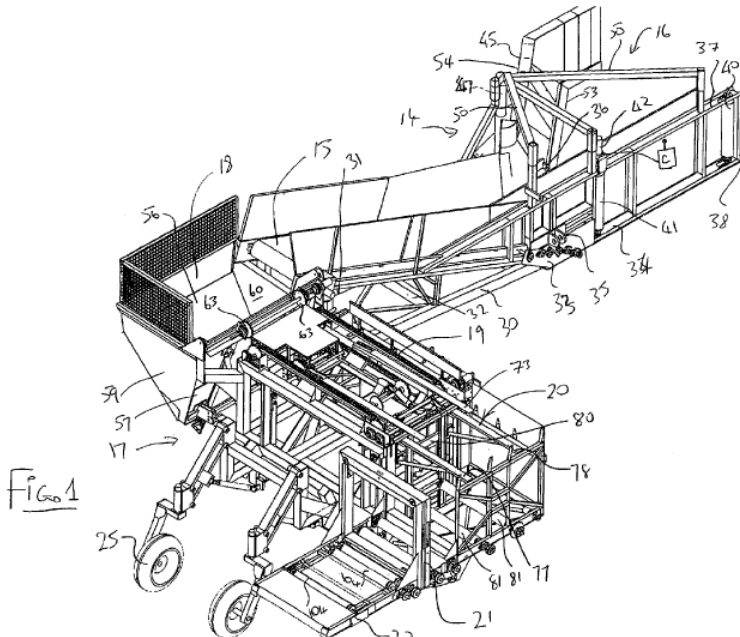
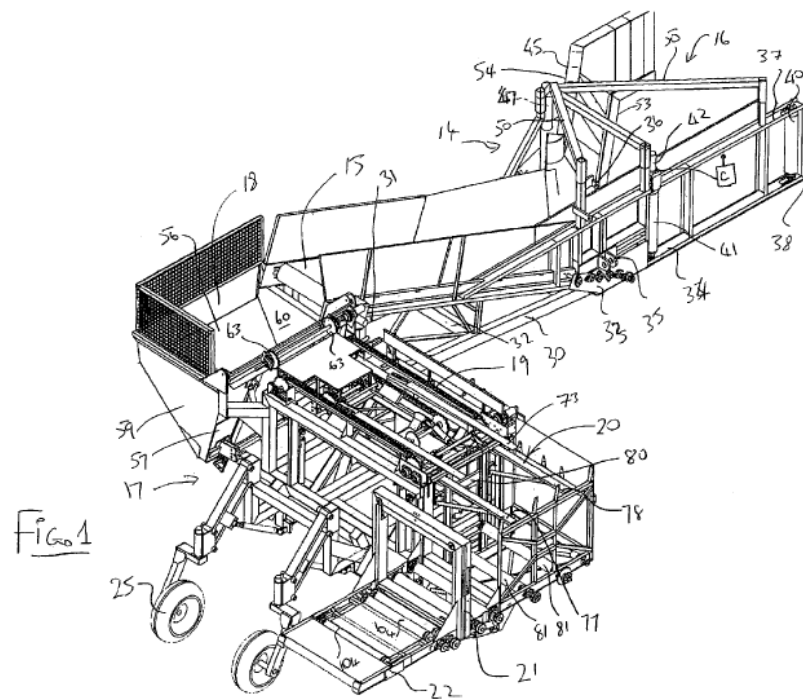


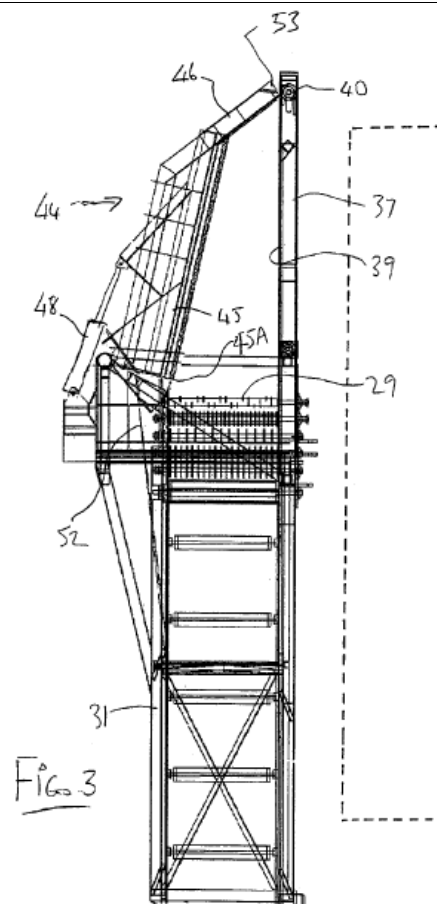
EXHIBIT G

Invalidity Contentions Claim Chart for U.S. Patent No. 7,591,629
Claims 1, 2, 4 and 6 in view of McLeod/Pisony and Simpson under 35 U.S.C. § 103

Claim 1	McLeod/Pisony and Simpson
An apparatus for picking up, stacking and bundling lumber, comprising:	The preamble is not a limitation. However, to the extent it could be construed to be a limitation, the '202 patent discloses an apparatus for picking up, stacking and bundling lumber": "[a]n apparatus for picking, conveying, stacking and bundling lumber pieces from the grounds ..." McLeod/Pisony, Abstract (57)
(a) a chassis,	"The elements provided by the picking and conveyer assembly 14 , the stacking assembly 17 and the bundling assembly 21 are all mounted on a frame for common movement with the vehicle 10 in the working direction 13 . The frame carrying these elements is attached to the vehicle by a four point hitch 23 at the rear of the vehicle and by coupling assembly generally indicated at 24 at the side of the vehicle and inwardly of the picking and conveyer assembly 14 . McLeod/Pisony, p. 11, l. 23-p. 12, l. 3.

	
<p>(b) a grapple carried with the chassis,</p>	<p>“Such an arrangement can also be used with a picking assembly in the form of a mechanically operated grapple which lifts the pieces from a large pile of the pieces for formation into stacks which are bundled and discharged. Again therefore this device in combination with a grapple type picking assembly is portable on a suitable trailer or frame carried by a vehicle so that it can be moved to a pile or collection of the piecing for stacking.” ‘McLeod/Pisomy, p. 13, ll. 2-7.</p>
<p>(c) a conveyor assembly supported on the chassis,</p>	<p>“The apparatus further includes a picking and conveyer assembly 14 having a main conveyer 15 attached to and arranged rearwardly of a picker 16.” ‘202 patent, 4:45-47. The elements provided by the picking and conveyer assembly 14, the stacking assembly 17 and the bundling assembly 21 are all mounted on a frame for common movement with the vehicle 10 in the working direction 13. McLeod/Pisomy, p. 11, ll. 18-25.</p>





(d)) a stacking assembly operatively connected adjacent the conveyor assembly, the stacking assembly including an unscrambling hopper, a row conveyor, a stacking bin and a bundling assembly, and,

“At the rear of the conveyer **15** is provided a stacking assembly **14** generally indicated at **17** including an unscrambling hopper **18**, a row conveyer **19** and a stacking assembly **20**. The apparatus further including a bundling assembly **21** including a discharge ramp **22**.” ‘202 patent, 4:47-52. The elements provided by the picking and conveyer assembly **14**, the stacking assembly **17** and the bundling assembly **21** are all mounted on a frame for common movement with the vehicle **10** in the working direction **13**. McLeod/Pisony, p. 11, ll. 19-25.

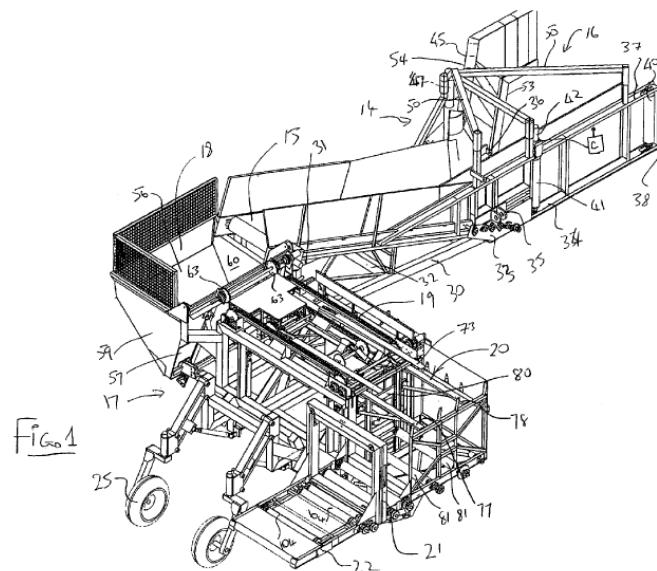
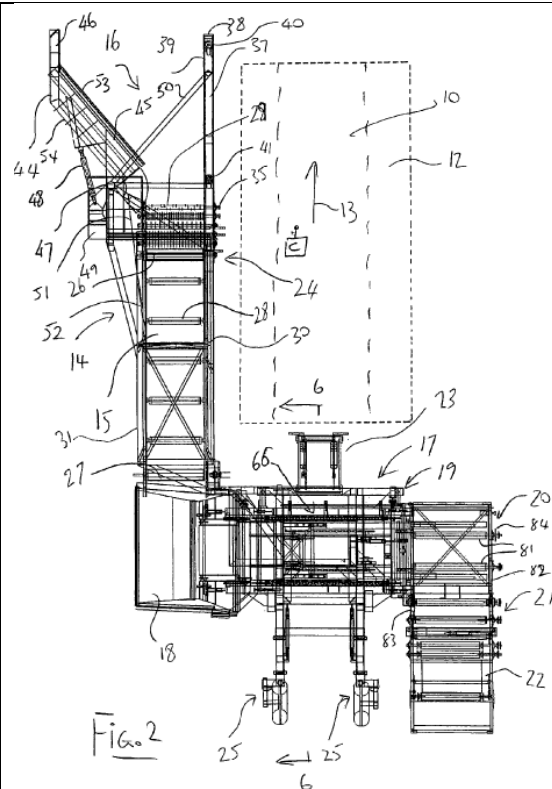
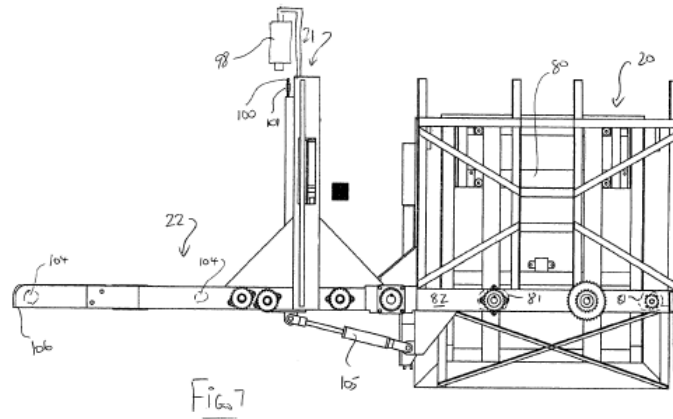


FIG. 1



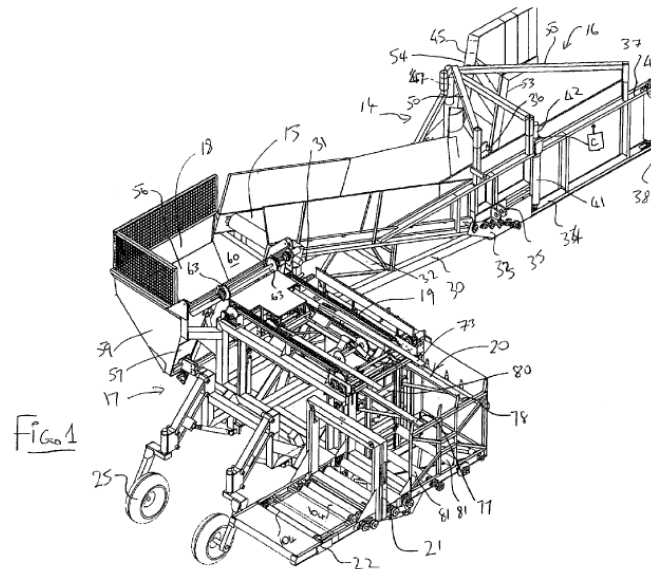
(e) a discharge platform operatively connected adjacent the bundling assembly,

The apparatus further including a bundling assembly **21** including a discharge ramp **22**.”
McLeod/Pisony, p. 11, ll. 22-23.



(f) wherein the conveyor assembly includes a frame,

“The conveyor is mounted on a frame section of the main frame having a first side **30** and a second side **31**. McLeod/Pisony, p. 14, ll. 10-12.

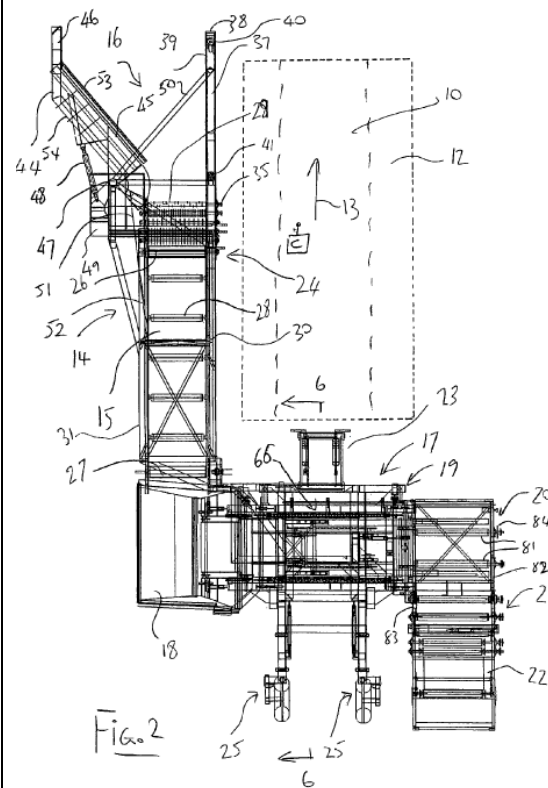


a pivotal connection for the frame to permit

“The side wall **30** includes mounting lugs **35** and **36** for receiving support elements of a coupling **24** which connects the side of the vehicle to the sidewall **30**. The coupling element **24**

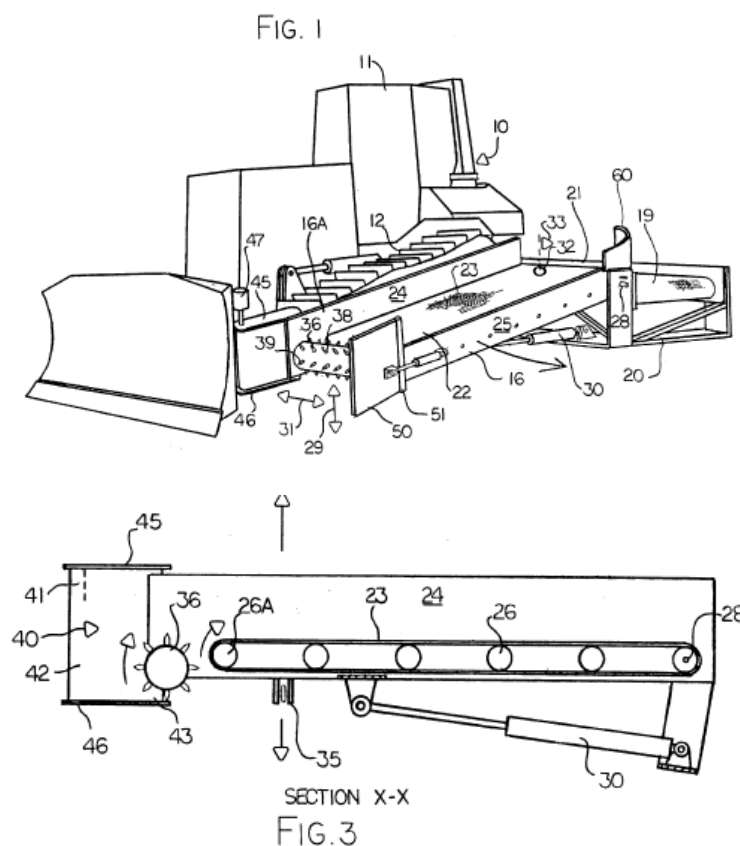
angular adjustment of the frame relative to the chassis,

includes a link which allows the frame to pivot inwardly and outwardly about a horizontal axis parallel to the direction **13** so that the picking section can pivot outwardly and upwardly or outwardly and downwardly to accommodate changes in ground contour. In addition to the angle of the bottom skid **34** about a horizontal pivot axis transverse to the direction **13** can be changed by actuating the four point hitch connection **23** and/or by lifting the linkage **24**.” McLeod/Pisony, p. 14, ll. 19-25.

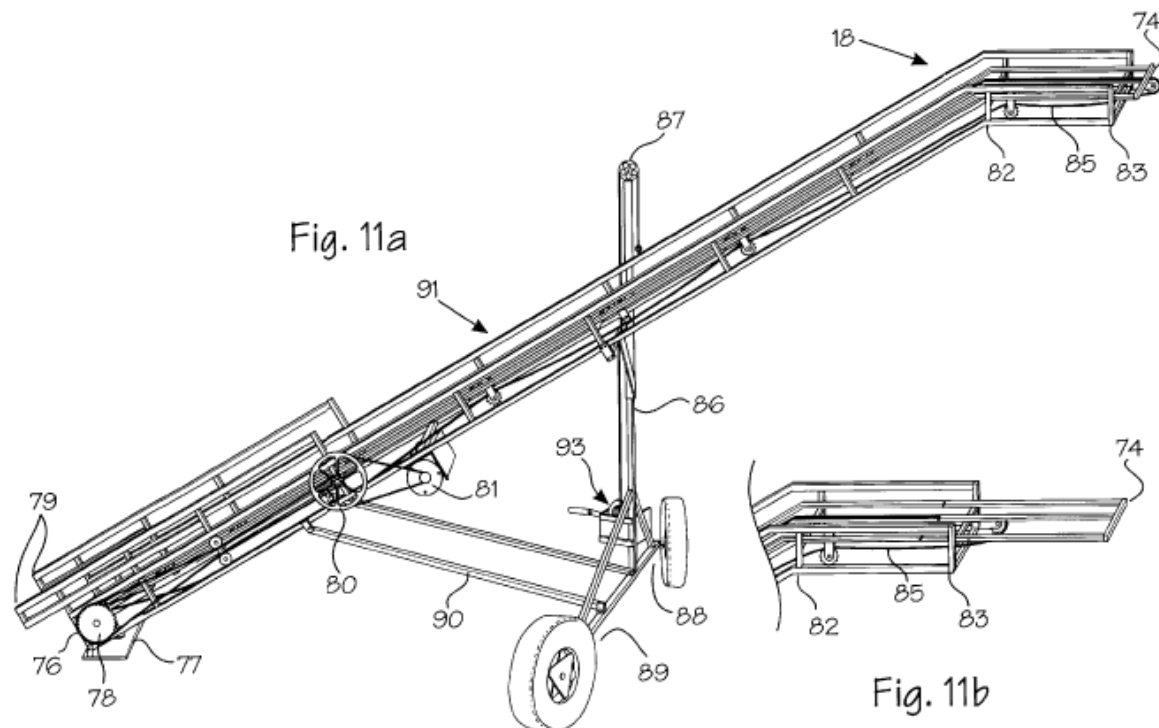


“In US patent 5934861 issued August 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2241682 published 26th February 1999, a first proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein

and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisony, p. 2, ll. 10-16. “The conveyor table **16** is mounted for pivotal movement about a horizontal pivot shaft **28** defining a pivot access adjacent the feed end **17a** for upward and downward vertical movement **29** of the forward end **27** of the conveyor table. Actuation of the vertical movement **29** is effected by a hydraulic drive cylinder **30** connected between the frame **20** and the underside of the conveyor table.” ‘861 patent, 2:66-3:5; “means mounting the conveyor table for movement of the forward end vertically up and down for adjustment of the height of the forward end.” ‘861 patent, 4:38-40.

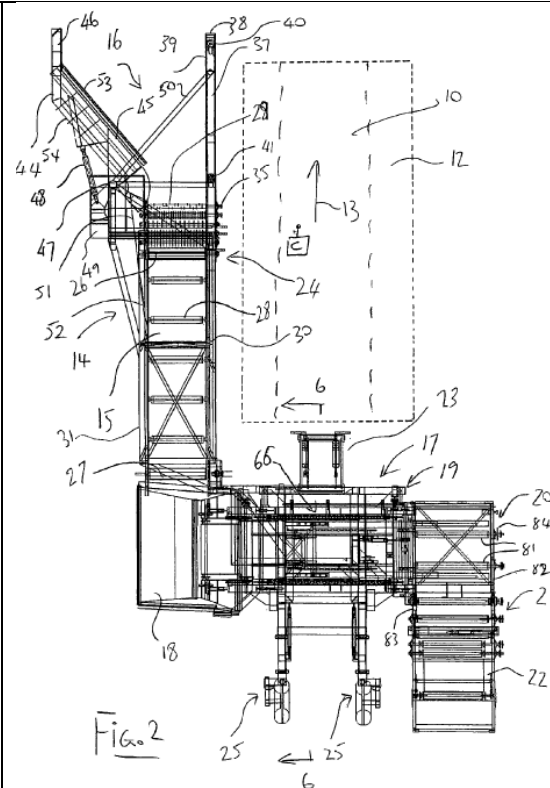


Simpson: “The loading conveyor subsystem has connected at one end a telescoping extension mechanism that facilitates the loading of the baled farm product onto the awaiting transportation.” Simpson, 4:33-36. “A loading conveyor subsystem 18, FIG. 1a, may, if desired, be connected to the present invention 10 to aid in the loading of the baled farm products 21 or 22 onto vehicle 25. The conveyor subsystem 18, FIG. 11a, is a free standing pivotal conveyor with a telescoping adjustable extension 74. One end 76 of the conveyor subsystem 19 is pivotally attached to a pivot plate 77. The pivot plate 77 allows the conveyor subsystem 18 to freely move 180° (degrees) about the pivot plate 77. If desired, the conveyor subsystem 18 may be restricted in movement to an arc formed from one adjacent point on the standard baler 11 to a second point oppositely spaced from the first point. This arcuate movement of the conveyor subsystem 18 allows repositioning of the conveyor during the loading of farm product onto truck 25. An extruded gate 79 is connected adjacent the conveyor end 76 and may, if desired, extend outward from the end 76. The extruded gate 79 receives the bales of farm product from the standard baler 11 and guides the bales towards the incline portion 91 of the conveyor subsystem 18. The incline portion 91 extends upward at a selected angle. The angle of inclination is derived from adjusting the conveyor subsystem 18 by turning the crank 93 attached to upright member 86 to a convenient position relative to the loading vehicle or truck 25.” Simpson, 9:58-10:14. “The upright member 86 is connected to a frame 90 that is connected to the frame of the conveyor subsystem 18.” Simpson, 10:28-29.



an extendible mast
connected between the
frame and the chassis to
drive the frame about the
pivotal connection

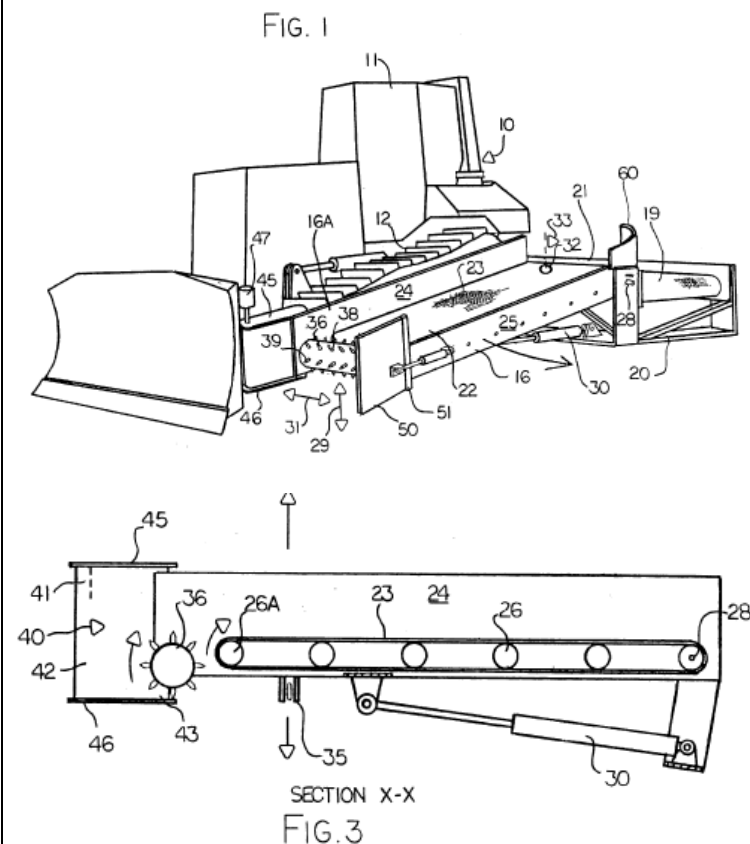
“The side wall **30** includes mounting lugs **35** and **36** for receiving support elements of a coupling **24** which connects the side of the vehicle to the sidewall **30**. The coupling element **24** includes a link which allows the frame to pivot inwardly and outwardly about a horizontal axis parallel to the direction **13** so that the picking section can pivot outwardly and upwardly or outwardly and downwardly to accommodate changes in ground contour. In addition to the angle of the bottom skid **34** about a horizontal pivot axis transverse to the direction **13** can be changed by actuating the four point hitch connection **23** and/or by lifting the linkage **24**.” McLeod/Pisomy, p. 14, ll. 17-25.



“In U.S. Pat. No. 5,934,861 issued Aug. 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2.241.682 published 26th Feb. 1999, a first proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisomy, p. 2, ll. 10-16.

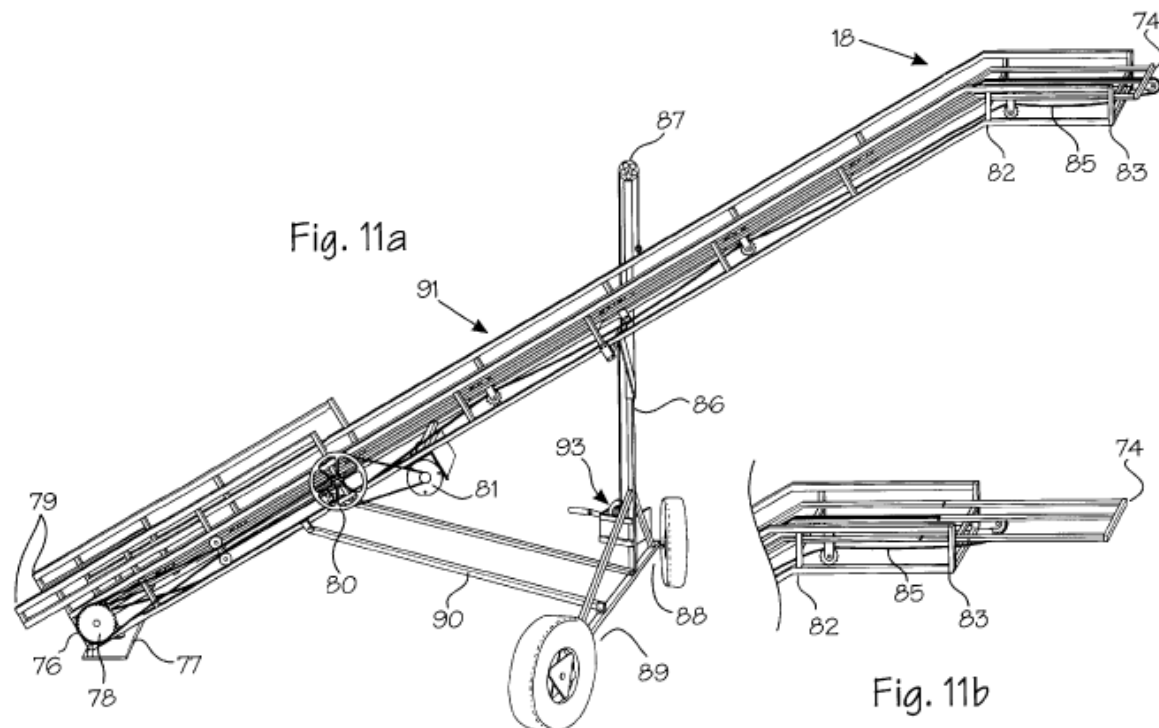
“The conveyor table **16** is mounted for pivotal movement about a horizontal pivot shaft **28** defining a pivot access adjacent the feed end **17a** for upward and downward vertical movement **29** of the forward end **27** of the conveyor table. Actuation of the vertical movement **29** is effected by a hydraulic drive cylinder **30** connected between the frame **20** and the underside of the conveyor table.” ‘861 patent, 2:66-3:5; “means mounting the conveyor table for movement of the

forward end vertically up and down for adjustment of the height of the forward end.” ‘861 patent, 4:38-40.



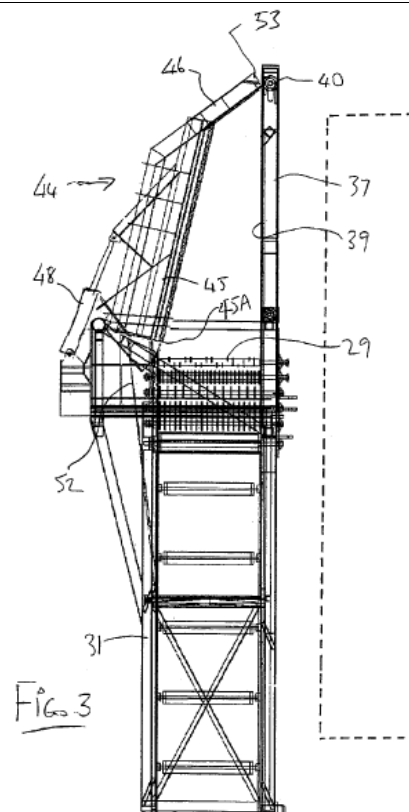
Simpson: “The loading conveyor subsystem has connected at one end a telescoping extension mechanism that facilitates the loading of the baled farm product onto the awaiting transportation.” Simpson, 4:33-36. “A loading conveyor subsystem 18, FIG. 1a, may, if desired, be connected to the present invention 10 to aid in the loading of the baled farm products 21 or 22 onto vehicle 25. The conveyor subsystem 18, FIG. 11a, is a free standing pivotal conveyor with a

	<p>telescoping adjustable extension 74. One end 76 of the conveyor subsystem 19 is pivotally attached to a pivot plate 77. The pivot plate 77 allows the conveyor subsystem 18 to freely move 180° (degrees) about the pivot plate 77. If desired, the conveyor subsystem 18 may be restricted in movement to an arc formed from one adjacent point on the standard baler 11 to a second point oppositely spaced from the first point. This arcuate movement of the conveyor subsystem 18 allows repositioning of the conveyor during the loading of farm product onto truck 25. An extruded gate 79 is connected adjacent the conveyor end 76 and may, if desired, extend outward from the end 76. The extruded gate 79 receives the bales of farm product from the standard baler 11 and guides the bales towards the incline portion 91 of the conveyor subsystem 18. The incline portion 91 extends upward at a selected angle. The angle of inclination is derived from adjusting the conveyor subsystem 18 by turning the crank 93 attached to upright member 86 to a convenient position relative to the loading vehicle or truck 25.” Simpson, 9:58-10:14. “The upright member 86 is connected to a frame 90 that is connected to the frame of the conveyor subsystem 18.” Simpson, 10:28-29.</p>
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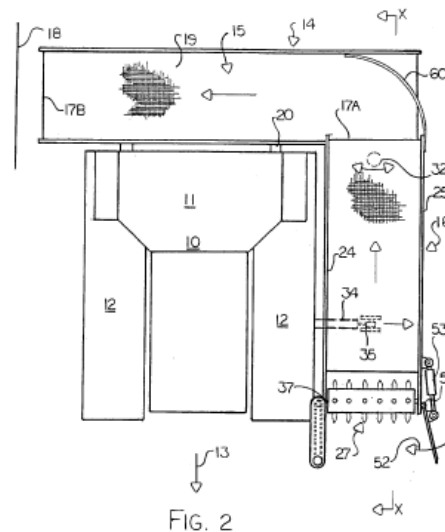
and a receiving bin and a conveyor carried on the frame,

“The conveyor **15** includes a conveyer belt having a forward end **26** and a rear end **27** and is mounted on a plurality of support rollers **28** so that an upper run of the belt carries the pieces rearwardly and upwardly from the forward end **26** into the unscrambling hopper **18** at the rear end **27**.” McLeod/Pisony, p. 13, ll. 8-11. “In front of the conveyer belt is provided a plurality of picking rollers **28** arranged in a row in front of the front roller of the conveyer. ... The front picking rollers therefore act to lift the pieces off the ground or in some cases out of embedded position within the ground by the spikes of the disc engaging in the pieces and lifting them upwardly onto the top of the rollers for movement rearwardly onto the conveyor.” McLeod/Pisony, p. 13, l. 12-p. 14, l. 9.



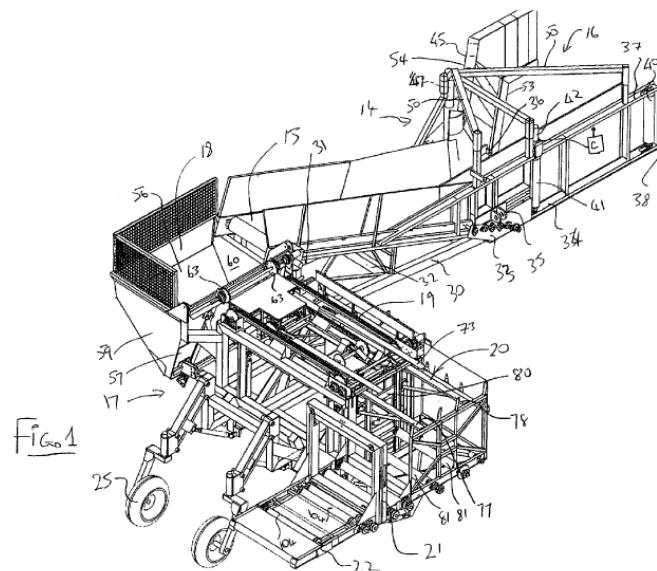
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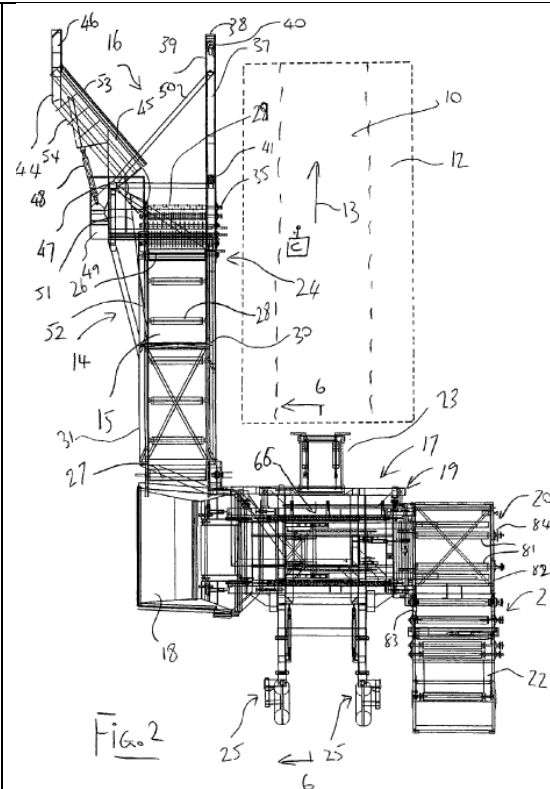
having a side belt **23** ...” ‘861 patent, 2:58-60.



the conveyor positioned between the receiving bin and the stacking assembly and being operable to move lumber from the receiving bin to the stacking assembly

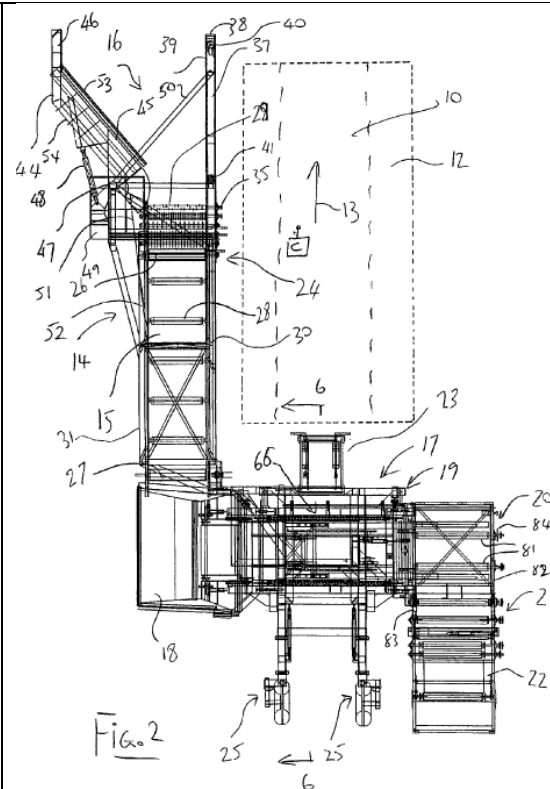
“The conveyor **15** includes a conveyor belt having a forward end **26** and a rear end **27** and is mounted on a plurality of support rollers **28** so that an upper run of the belt carries the pieces rearwardly and upwardly from the forward end **26** into the unscrambling hopper **18** at the rear end **27**.” McLeod/Pisony, p. 13, ll. 8-11





and the mast being operable to drive adjustment of the angle of the frame relative to the chassis to select the approach angle for the conveyor relative to the stacking assembly.

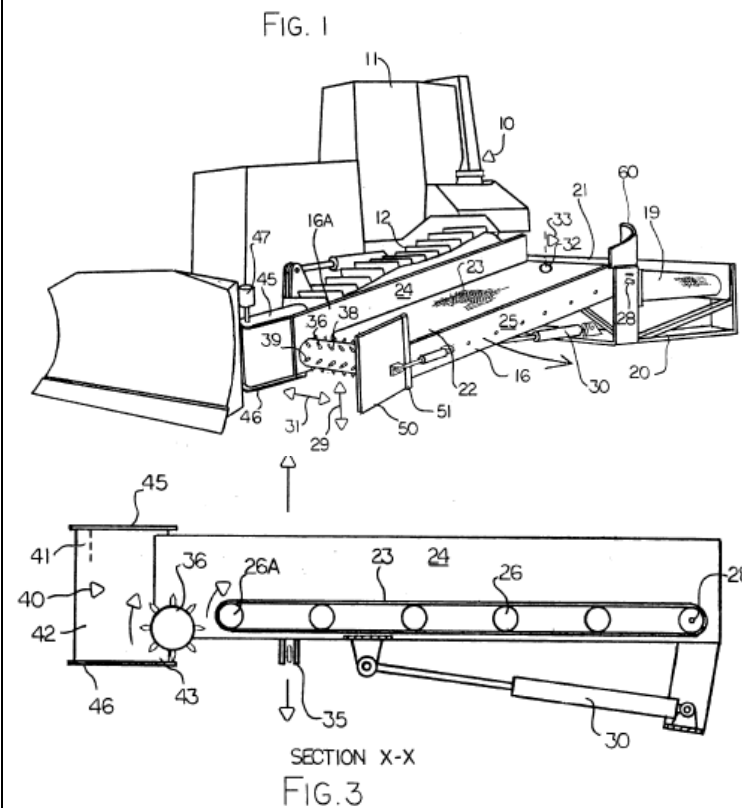
“The side wall **30** includes mounting lugs **35** and **36** for receiving support elements of a coupling **24** which connects the side of the vehicle to the sidewall **30**. The coupling element **24** includes a link which allows the frame to pivot inwardly and outwardly about a horizontal axis parallel to the direction **13** so that the picking section can pivot outwardly and upwardly or outwardly and downwardly to accommodate changes in ground contour. In addition to the angle of the bottom skid **34** about a horizontal pivot axis transverse to the direction **13** can be changed by actuating the four point hitch connection **23** and/or by lifting the linkage **24**.”
 ‘McLeod/Pisomy, p. 14ll. 17-25



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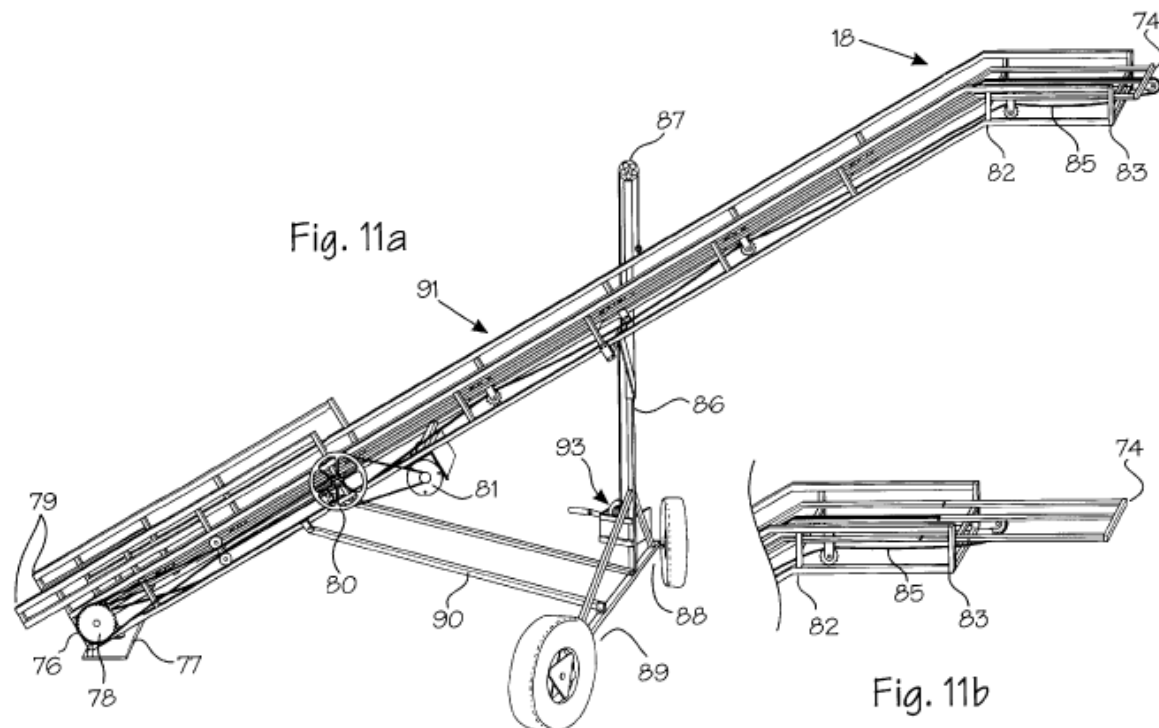
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forward end vertically up and down for adjustment of the height of the forward end.” ‘861 patent, 4:38-40.



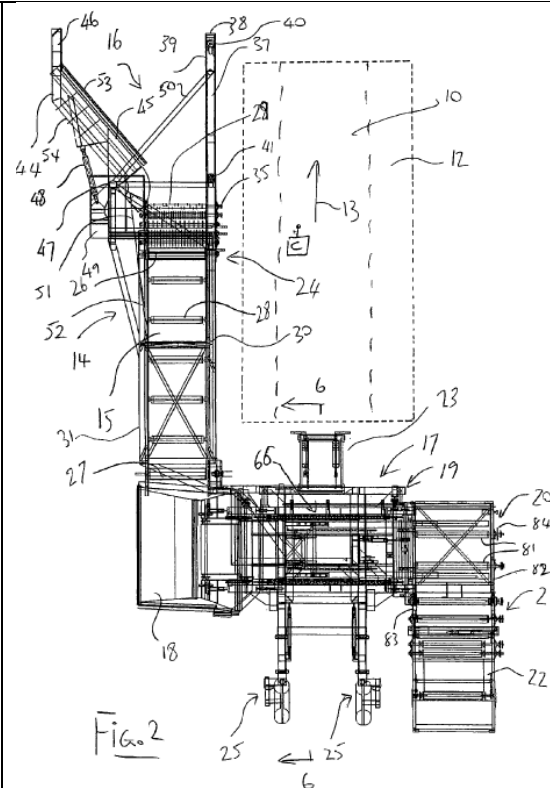
Simpson: “The loading conveyor subsystem has connected at one end a telescoping extension mechanism that facilitates the loading of the baled farm product onto the awaiting transportation.” Simpson, 4:33-36. “A loading conveyor subsystem 18, FIG. 1a, may, if desired, be connected to the present invention 10 to aid in the loading of the baled farm products 21 or 22 onto vehicle 25. The conveyor subsystem 18, FIG. 11a, is a free standing pivotal conveyor with a telescoping adjustable extension 74. One end 76 of the conveyor subsystem 19 is pivotally attached to a pivot plate 77. The pivot plate 77 allows the conveyor subsystem 18 to freely move

	<p>180° (degrees) about the pivot plate 77. If desired, the conveyor subsystem 18 may be restricted in movement to an arc formed from one adjacent point on the standard baler 11 to a second point oppositely spaced from the first point. This arcuate movement of the conveyor subsystem 18 allows repositioning of the conveyor during the loading of farm product onto truck 25. An extruded gate 79 is connected adjacent the conveyor end 76 and may, if desired, extend outward from the end 76. The extruded gate 79 receives the bales of farm product from the standard baler 11 and guides the bales towards the incline portion 91 of the conveyor subsystem 18. The incline portion 91 extends upward at a selected angle. The angle of inclination is derived from adjusting the conveyor subsystem 18 by turning the crank 93 attached to upright member 86 to a convenient position relative to the loading vehicle or truck 25.” Simpson, 9:58-10:14. “The upright member 86 is connected to a frame 90 that is connected to the frame of the conveyor subsystem 18.” Simpson, 10:28-29.</p>
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**Claim 2**

The apparatus of claim 1 wherein the mast drives the frame adjacent the receiving bin to select a spacing between the frame and the chassis.

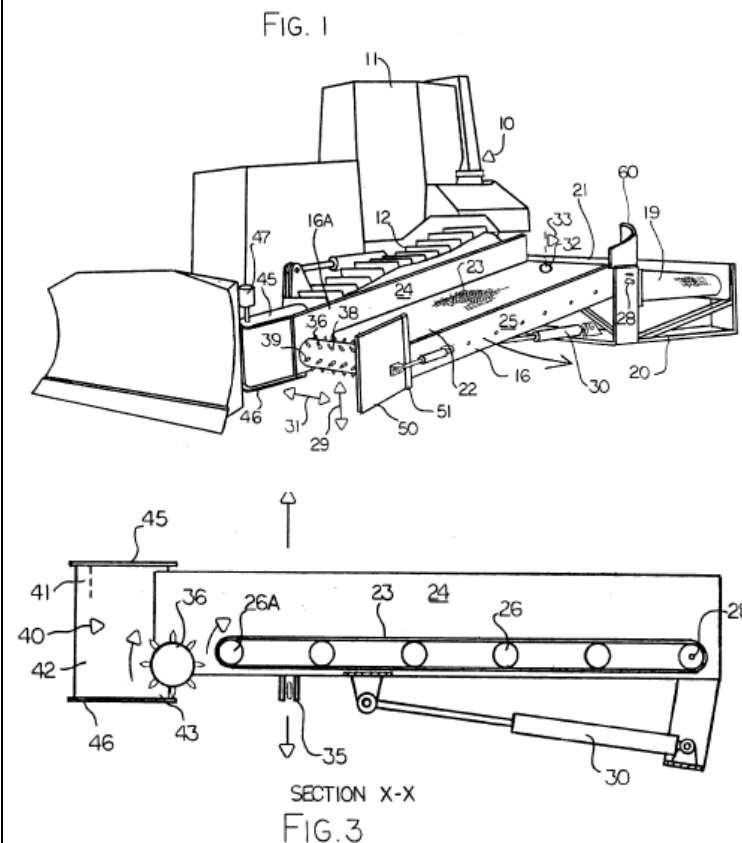
“The side wall **30** includes mounting lugs **35** and **36** for receiving support elements of a coupling **24** which connects the side of the vehicle to the sidewall **30**. The coupling element **24** includes a link which allows the frame to pivot inwardly and outwardly about a horizontal axis parallel to the direction **13** so that the picking section can pivot outwardly and upwardly or outwardly and downwardly to accommodate changes in ground contour. In addition to the angle of the bottom skid **34** about a horizontal pivot axis transverse to the direction **13** can be changed by actuating the four point hitch connection **23** and/or by lifting the linkage **24**.” McLeod/Pisony, p. 14, 17-25.



“In U.S. Pat. No. 5,934,861 issued Aug. 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2.241.682 published 26th Feb. 1999, a first proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisomy, p. 2, ll. 10-16.

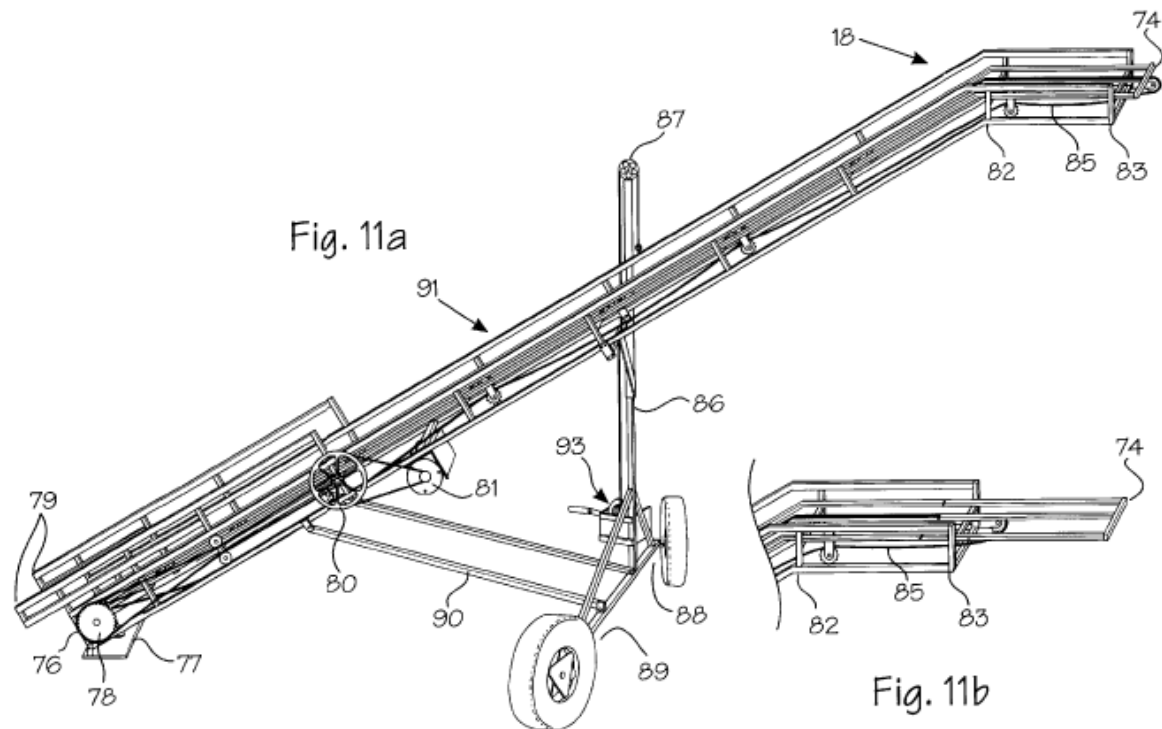
“The conveyor table **16** is mounted for pivotal movement about a horizontal pivot shaft **28** defining a pivot access adjacent the feed end **17a** for upward and downward vertical movement **29** of the forward end **27** of the conveyor table. Actuation of the vertical movement **29** is effected by a hydraulic drive cylinder **30** connected between the frame **20** and the underside of the conveyor table.” ‘861 patent, 2:66-3:5; “means mounting the conveyor table for movement of the

forward end vertically up and down for adjustment of the height of the forward end.” ‘861 patent, 4:38-40.



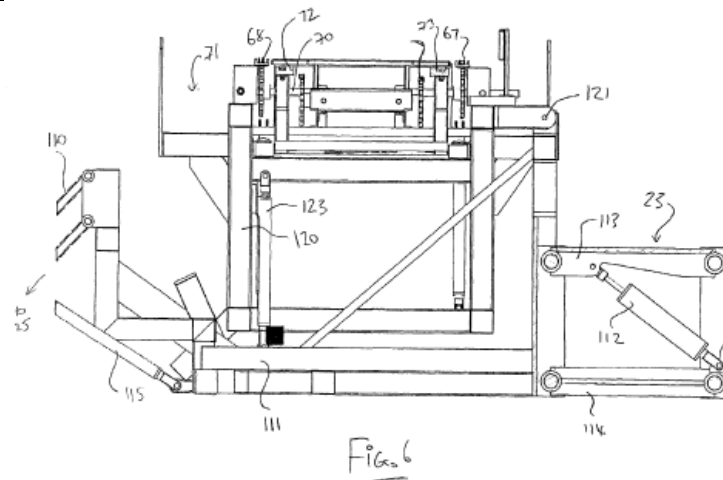
Simpson: “The loading conveyor subsystem has connected at one end a telescoping extension mechanism that facilitates the loading of the baled farm product onto the awaiting transportation.” Simpson, 4:33-36. “A loading conveyor subsystem 18, FIG. 1a, may, if desired, be connected to the present invention 10 to aid in the loading of the baled farm products 21 or 22 onto vehicle 25. The conveyor subsystem 18, FIG. 11a, is a free standing pivotal conveyor with a telescoping adjustable extension 74. One end 76 of the conveyor subsystem 19 is pivotally

	<p>attached to a pivot plate 77. The pivot plate 77 allows the conveyor subsystem 18 to freely move 180° (degrees) about the pivot plate 77. If desired, the conveyor subsystem 18 may be restricted in movement to an arc formed from one adjacent point on the standard baler 11 to a second point oppositely spaced from the first point. This arcuate movement of the conveyor subsystem 18 allows repositioning of the conveyor during the loading of farm product onto truck 25. An extruded gate 79 is connected adjacent the conveyor end 76 and may, if desired, extend outward from the end 76. The extruded gate 79 receives the bales of farm product from the standard baler 11 and guides the bales towards the incline portion 91 of the conveyor subsystem 18. The incline portion 91 extends upward at a selected angle. The angle of inclination is derived from adjusting the conveyor subsystem 18 by turning the crank 93 attached to upright member 86 to a convenient position relative to the loading vehicle or truck 25.” Simpson, 9:58-10:14. “The upright member 86 is connected to a frame 90 that is connected to the frame of the conveyor subsystem 18.” Simpson, 10:28-29.</p>
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**Claim 4**

The apparatus of claim 1 wherein the stacking assembly further includes a pivoting arrangement for tilting the stacking assembly relative to the chassis to provide for substantial leveling of the stacking assembly when operating on uneven ground surfaces.

“[T]he stacking section included in the conveyor **66** and the stacking arms on the vertical conveyer of the stacking assembly is mounted on a subframe section **120** separate from the frame section **111** and pivotally connected to the frame section **111** on a pivot pin **121**. The height of the stacking section relative to the frame section **111** can be adjusted by a cylinder **123** under control of the operator standing on the frame **71**. Thus the stacking section can be maintained substantially horizontal relative to a front to rear direction by pivoting action about the horizontal transverse pivot pin **121**.” McLeod/Pisony, p. 24, l-p. 25, l. 6.



“The apparatus of claim 11 wherein the stacking assembly and the bundling assembly are mounted on a sub-frame portion of the frame which is arranged for pivotal movement relative to the frame and relative to the conveyor about a horizontal axis transverse to the direction of the movement of the vehicle to maintain the stacking assembly and bundling assembly substantially level as the vehicle moves.” McLeod/Pisony, p. 31, ll. 11-16.

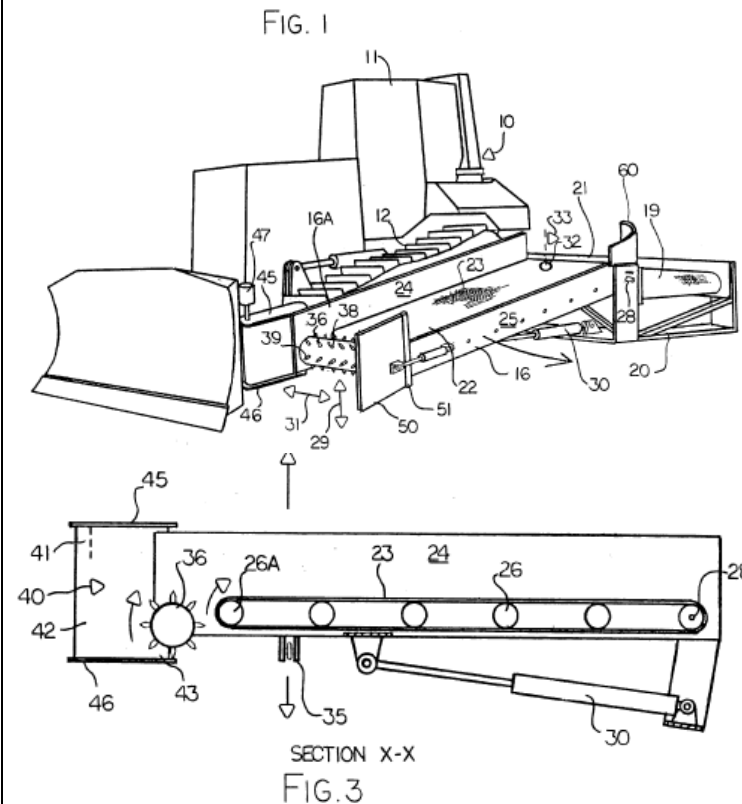
Claim 6

The apparatus of claim 1 wherein the mast includes a hydraulic cylinder drivable to telescope to various lengths.

“In U.S. Pat. No. 5,934,861 issued Aug. 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2.241.682 published 26th Feb. 1999, a first proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisony, p. 2, ll. 10-16.

“The conveyor table **16** is mounted for pivotal movement about a horizontal pivot shaft **28** defining a pivot axis adjacent the feed end **17a** for upward and downward vertical movement **29** of the forward end **27** of the conveyor table. Actuation of the vertical movement **29** is effected by a hydraulic drive cylinder **30** connected between the frame **20** and the underside of the conveyor table.” ‘861 patent, 2:66-3:5; “means mounting the conveyor table for movement of the forward end vertically up and down for adjustment of the height of the forward end.” ‘861

patent, 4:38-40;



Simpson: “The loading conveyor subsystem has connected at one end a telescoping extension mechanism that facilitates the loading of the baled farm product onto the awaiting transportation.” Simpson, 4:33-36. “A loading conveyor subsystem 18, FIG. 1a, may, if desired, be connected to the present invention 10 to aid in the loading of the baled farm products 21 or 22 onto vehicle 25. The conveyor subsystem 18, FIG. 11a, is a free standing pivotal conveyor with a telescoping adjustable extension 74. One end 76 of the conveyor subsystem 19 is pivotally attached to a pivot plate 77. The pivot plate 77 allows the conveyor subsystem 18 to freely move

	<p>180° (degrees) about the pivot plate 77. If desired, the conveyor subsystem 18 may be restricted in movement to an arc formed from one adjacent point on the standard baler 11 to a second point oppositely spaced from the first point. This arcuate movement of the conveyor subsystem 18 allows repositioning of the conveyor during the loading of farm product onto truck 25. An extruded gate 79 is connected adjacent the conveyor end 76 and may, if desired, extend outward from the end 76. The extruded gate 79 receives the bales of farm product from the standard baler 11 and guides the bales towards the incline portion 91 of the conveyor subsystem 18. The incline portion 91 extends upward at a selected angle. The angle of inclination is derived from adjusting the conveyor subsystem 18 by turning the crank 93 attached to upright member 86 to a convenient position relative to the loading vehicle or truck 25.” Simpson, 9:58-10:14. “The upright member 86 is connected to a frame 90 that is connected to the frame of the conveyor subsystem 18.” Simpson, 10:28-29.</p>
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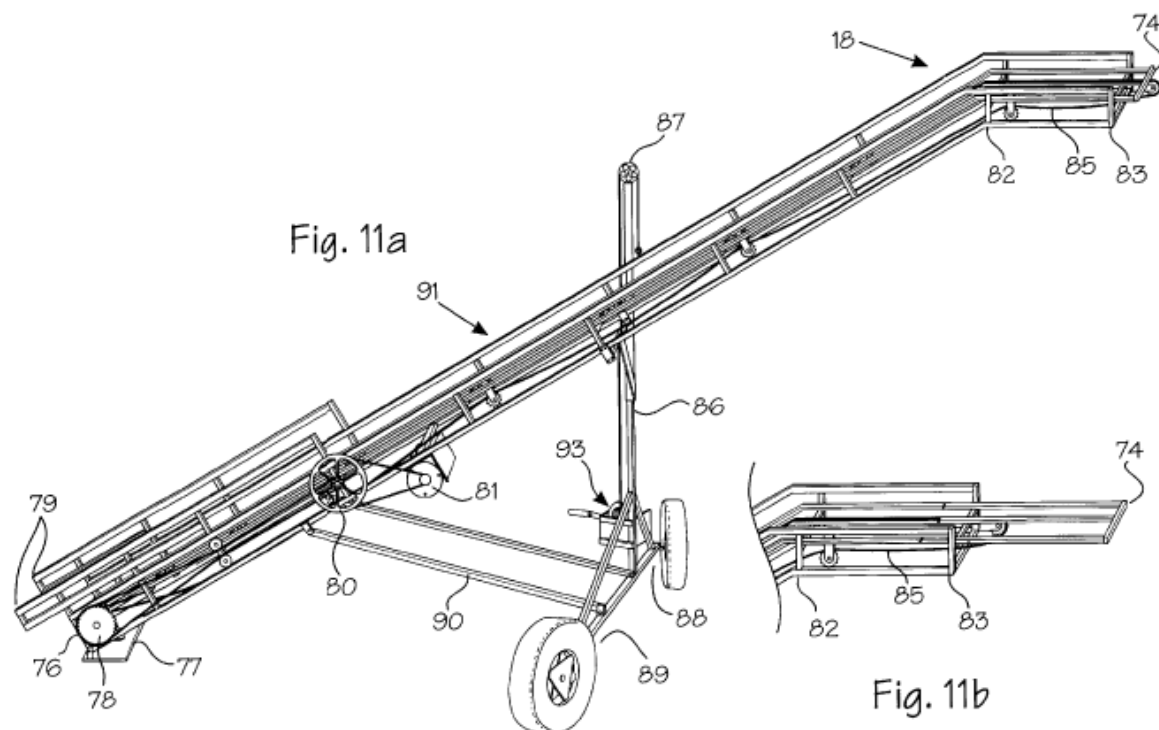
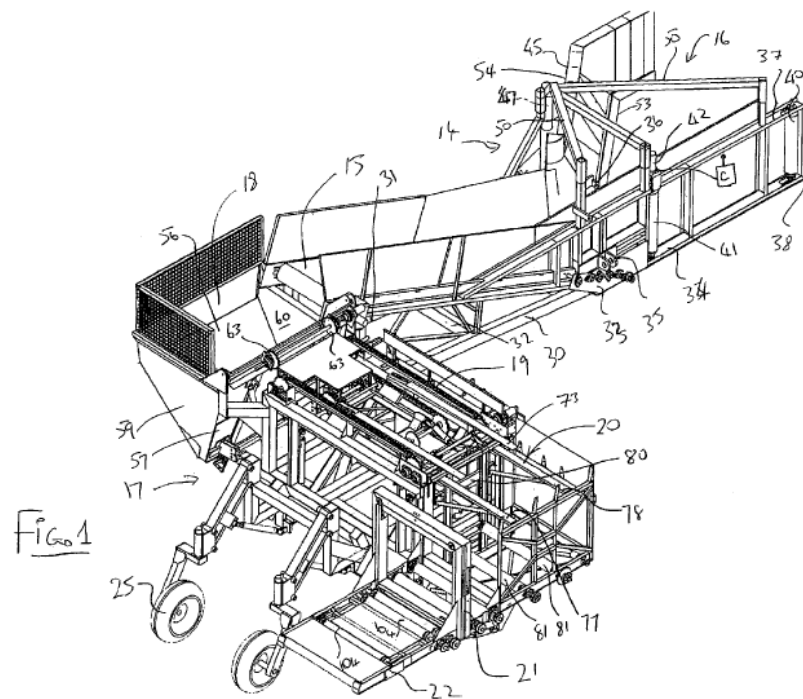


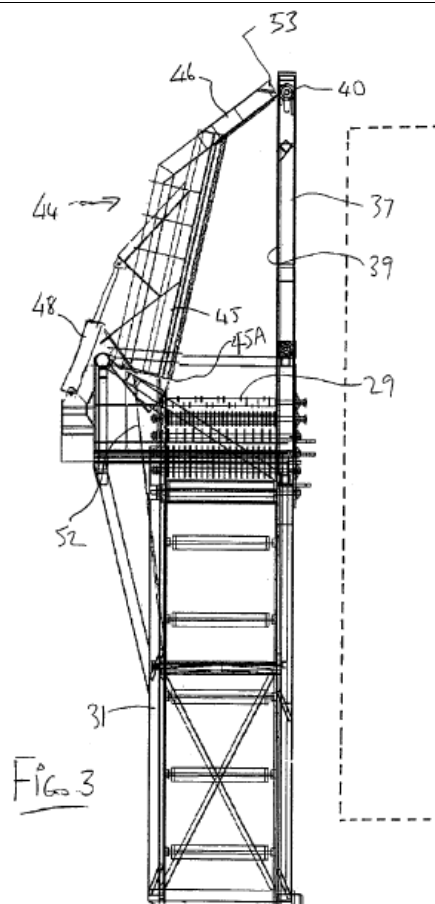
EXHIBIT I

Invalidity Contentions Claim Chart for U.S. Patent No. 7,591,629
Claims 1, 2, 4 and 6 in view of McLeod/Pisony and Baily under 35 U.S.C. § 103

Claim 1	McLeod/Pisony and Baily
An apparatus for picking up, stacking and bundling lumber, comprising:	The preamble is not a limitation. However, to the extent it could be construed to be a limitation, the '202 patent discloses an apparatus for picking up, stacking and bundling lumber": "[a]n apparatus for picking, conveying, stacking and bundling lumber pieces from the grounds ..." McLeod/Pisony, Abstract (57)
(a) a chassis,	"The elements provided by the picking and conveyer assembly 14 , the stacking assembly 17 and the bundling assembly 21 are all mounted on a frame for common movement with the vehicle 10 in the working direction 13 . The frame carrying these elements is attached to the vehicle by a four point hitch 23 at the rear of the vehicle and by coupling assembly generally indicated at 24 at the side of the vehicle and inwardly of the picking and conveyer assembly 14 . McLeod/Pisony, p. 11, l. 23-p. 12, l. 3.

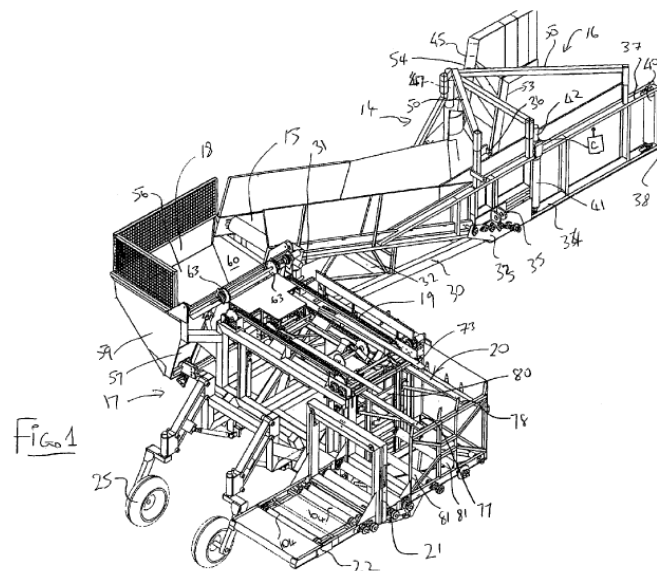
(b) a grapple carried with the chassis,	<p>“Such an arrangement can also be used with a picking assembly in the form of a mechanically operated grapple which lifts the pieces from a large pile of the pieces for formation into stacks which are bundled and discharged. Again therefore this device in combination with a grapple type picking assembly is portable on a suitable trailer or frame carried by a vehicle so that it can be moved to a pile or collection of the piecing for stacking.” ‘McLeod/Pisony, p. 13, ll. 2-7.</p>
(c) a conveyor assembly supported on the chassis,	<p>“The apparatus further includes a picking and conveyer assembly 14 having a main conveyer 15 attached to and arranged rearwardly of a picker 16.” ‘202 patent, 4:45-47. The elements provided by the picking and conveyer assembly 14, the stacking assembly 17 and the bundling assembly 21 are all mounted on a frame for common movement with the vehicle 10 in the working direction 13. McLeod/Pisony, p. 11, ll. 18-25.</p>

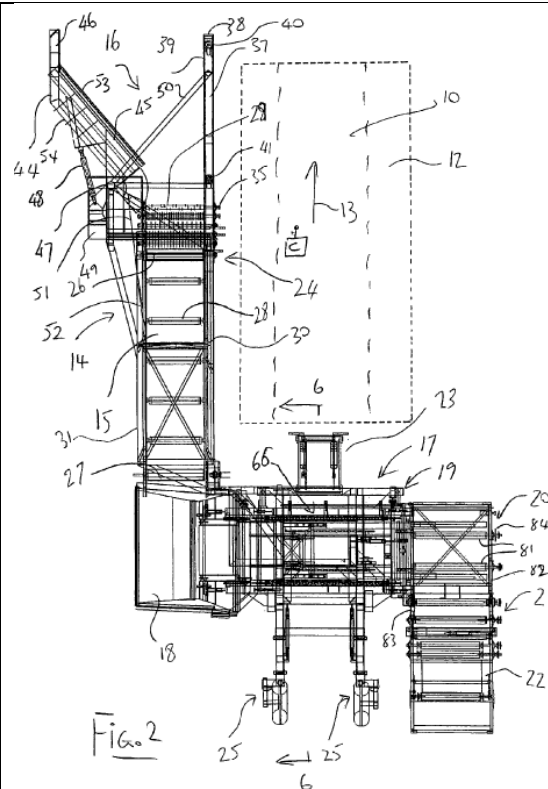




(d)) a stacking assembly operatively connected adjacent the conveyor assembly, the stacking assembly including an unscrambling hopper, a row conveyor, a stacking bin and a bundling assembly, and,

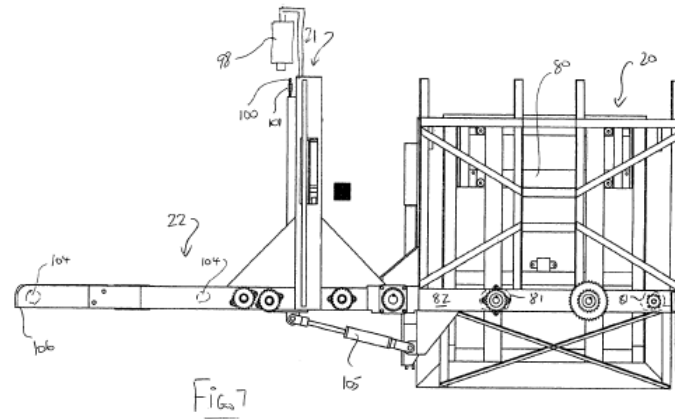
“At the rear of the conveyer **15** is provided a stacking assembly **14** generally indicated at **17** including an unscrambling hopper **18**, a row conveyer **19** and a stacking assembly **20**. The apparatus further including a bundling assembly **21** including a discharge ramp **22**.” ‘202 patent, 4:47-52. The elements provided by the picking and conveyer assembly **14**, the stacking assembly **17** and the bundling assembly **21** are all mounted on a frame for common movement with the vehicle **10** in the working direction **13**. McLeod/Pisony, p. 11, ll. 19-25.





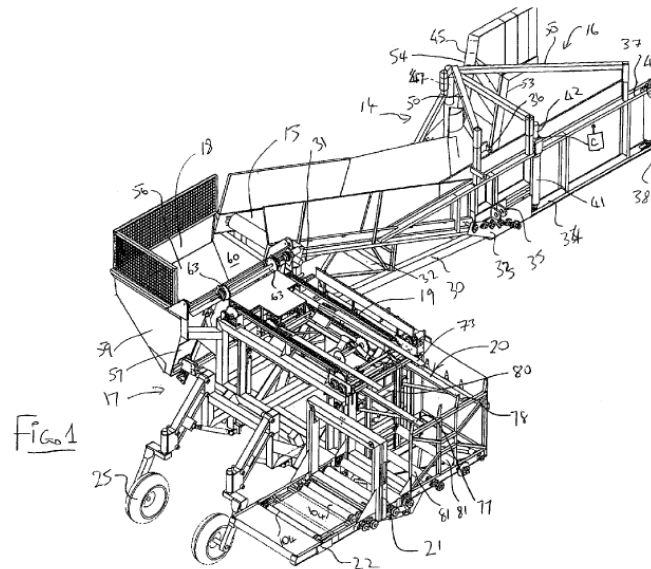
(e) a discharge platform operatively connected adjacent the bundling assembly,

The apparatus further including a bundling assembly **21** including a discharge ramp **22**.”
McLeod/Pisony, p. 11, ll. 22-23.



(f) wherein the conveyor assembly includes a frame,

“The conveyor is mounted on a frame section of the main frame having a first side **30** and a second side **31**. McLeod/Pisony, p. 14, ll. 10-12.

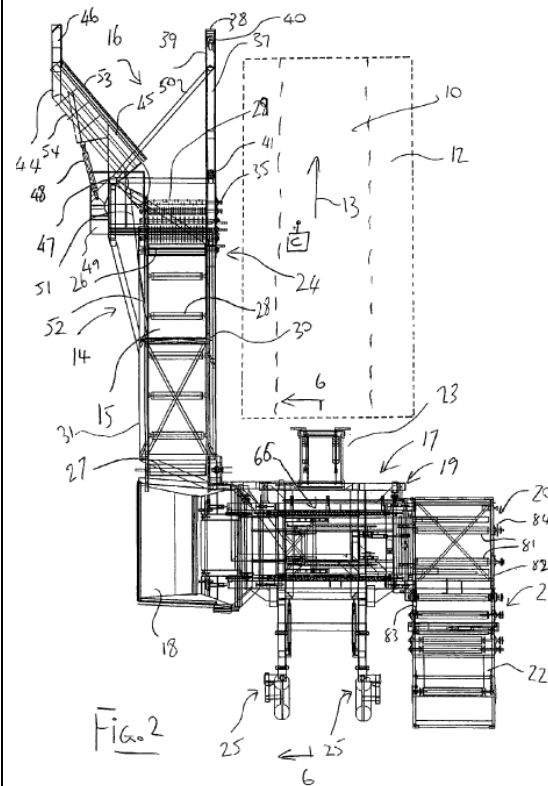


a pivotal connection for the frame to permit

“The side wall **30** includes mounting lugs **35** and **36** for receiving support elements of a coupling **24** which connects the side of the vehicle to the sidewall **30**. The coupling element **24**

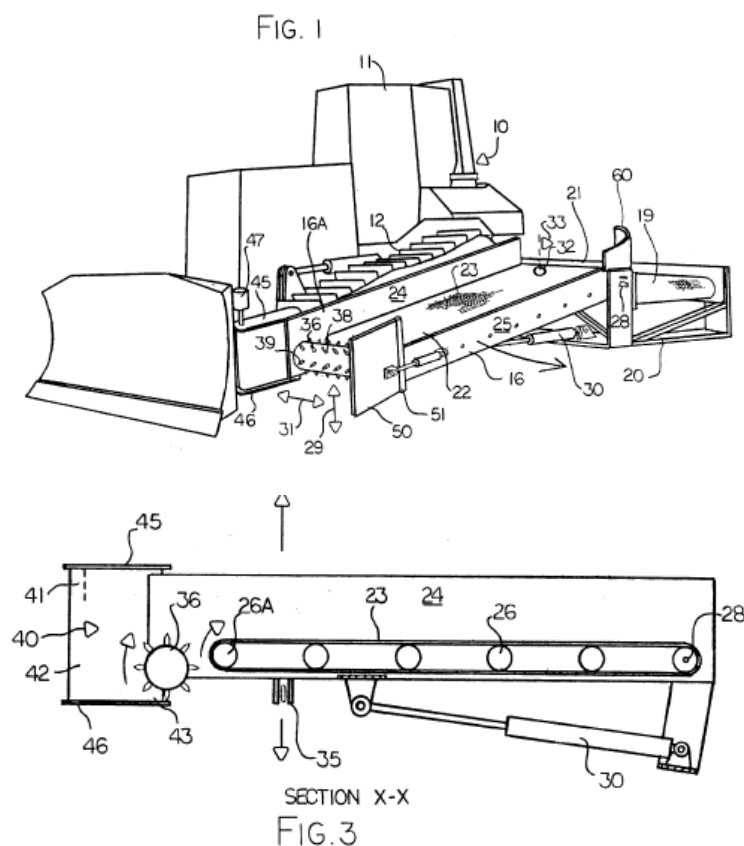
angular adjustment of the frame relative to the chassis,

includes a link which allows the frame to pivot inwardly and outwardly about a horizontal axis parallel to the direction **13** so that the picking section can pivot outwardly and upwardly or outwardly and downwardly to accommodate changes in ground contour. In addition to the angle of the bottom skid **34** about a horizontal pivot axis transverse to the direction **13** can be changed by actuating the four point hitch connection **23** and/or by lifting the linkage **24**.” McLeod/Pisony, p. 14, ll. 19-25.



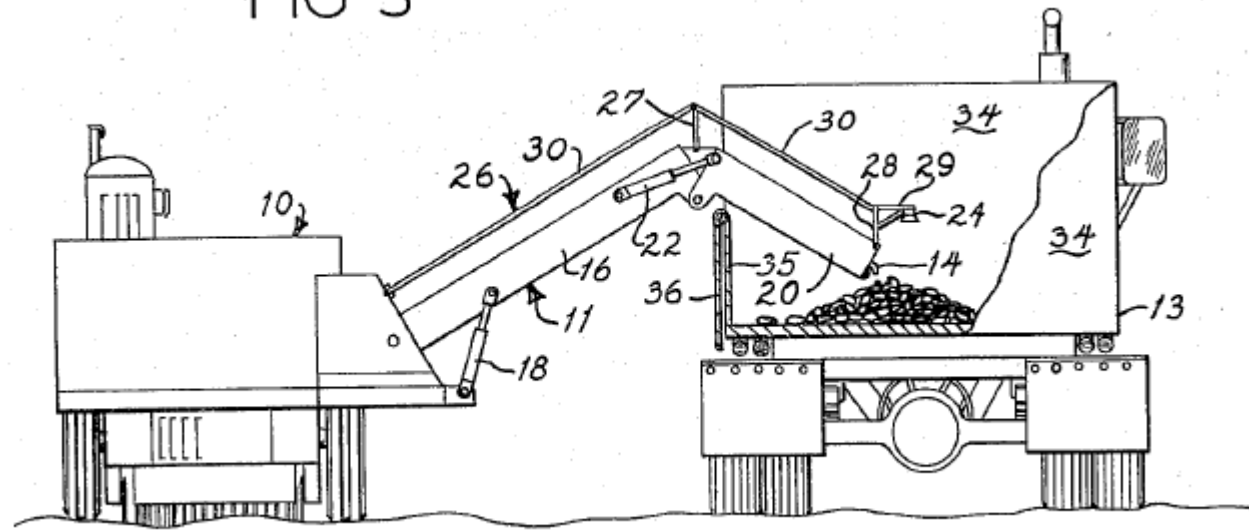
“In US patent 5934861 issued August 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2241682 published 26th February 1999, a first proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein

and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisony, p. 2, ll. 10-16. “The conveyor table **16** is mounted for pivotal movement about a horizontal pivot shaft **28** defining a pivot access adjacent the feed end **17a** for upward and downward vertical movement **29** of the forward end **27** of the conveyor table. Actuation of the vertical movement **29** is effected by a hydraulic drive cylinder **30** connected between the frame **20** and the underside of the conveyor table.” ‘861 patent, 2:66-3:5; “means mounting the conveyor table for movement of the forward end vertically up and down for adjustment of the height of the forward end.” ‘861 patent, 4:38-40.



Baily: “To prevent damage to the produce as it falls from the delivery end 14 of conveyor 11, the conveyor boom is articulated at two points dividing the boom into a main boom section 16 adjacent implement 10, and an end boom pivotably mounted to the main boom section 16. Main boom 16 is mounted to the implement for pivotal movement about the horizontal axis of a pivot 17 and is powered to pivot about that axis by means of a double acting hydraulic cylinder 18. The end boom 20 is connected to the main boom 16 about the axis of a pivot 21 having an axis parallel to the axis of pivot 17. The end boom is pivoted by means of another double acting hydraulic cylinder 22. The apparatus of the present invention is utilized to control operation of the hydraulic cylinders 18 and 22 to maintain a prescribed distance between the conveyor discharge end 14 and the upper surface of the pile of material on the truck bed 13.” Baily, 3:27-54.

FIG 3

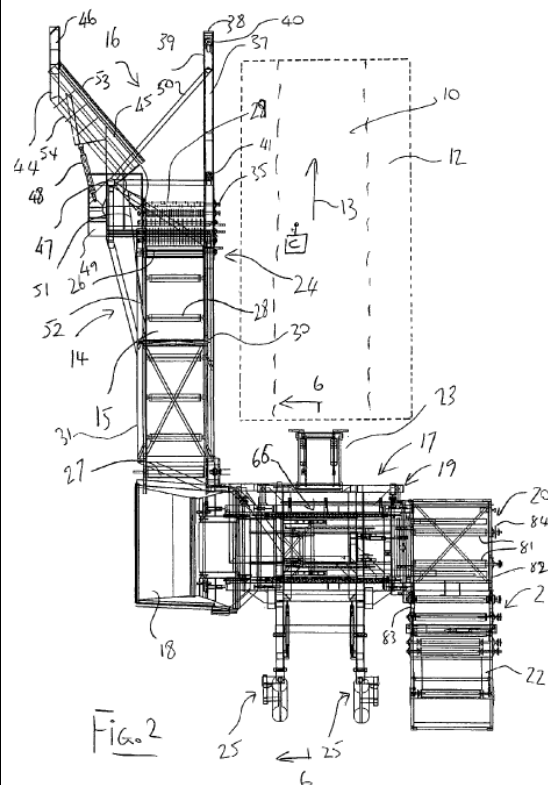


an extendible mast
connected between the
frame and the chassis to

“The side wall 30 includes mounting lugs 35 and 36 for receiving support elements of a coupling 24 which connects the side of the vehicle to the sidewall 30. The coupling element 24 includes a link which allows the frame to pivot inwardly and outwardly about a horizontal axis

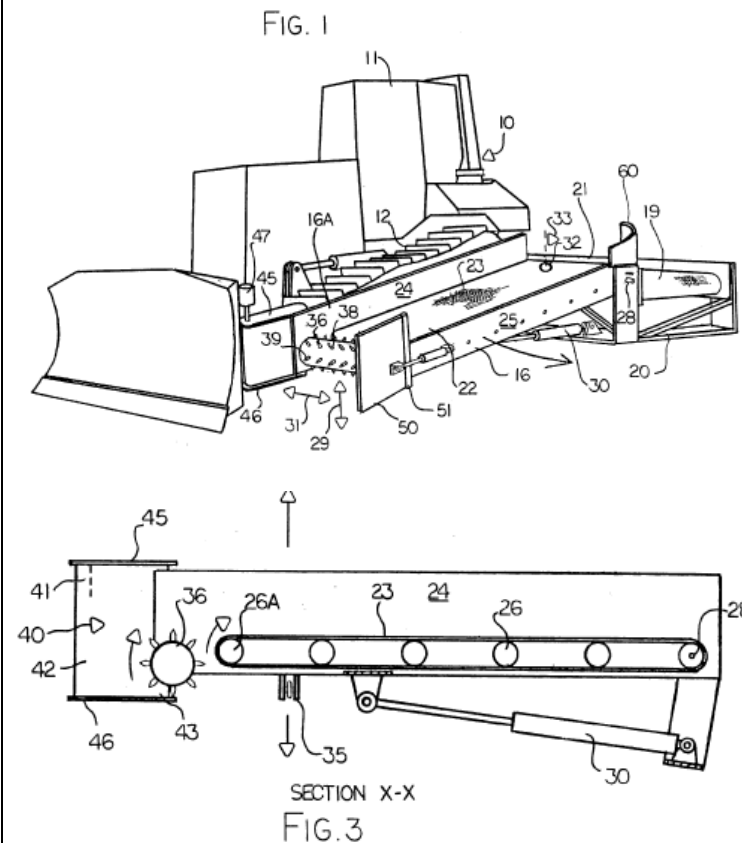
drive the frame about the pivotal connection

parallel to the direction **13** so that the picking section can pivot outwardly and upwardly or outwardly and downwardly to accommodate changes in ground contour. In addition to the angle of the bottom skid **34** about a horizontal pivot axis transverse to the direction **13** can be changed by actuating the four point hitch connection **23** and/or by lifting the linkage **24**." McLeod/Pisony, p. 14, ll. 17-25.



"In U.S. Pat. No. 5,934,861 issued Aug. 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2.241.682 published 26th Feb. 1999, a first proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics." McLeod/Pisony, p. 2, ll. 10-16.

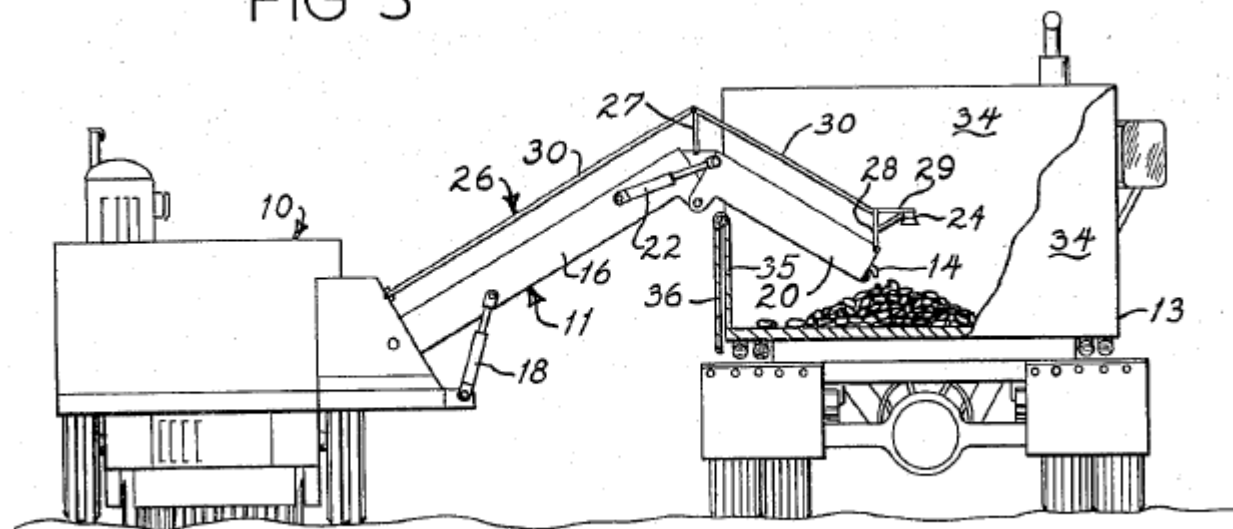
“The conveyor table **16** is mounted for pivotal movement about a horizontal pivot shaft **28** defining a pivot access adjacent the feed end **17a** for upward and downward vertical movement **29** of the forward end **27** of the conveyor table. Actuation of the vertical movement **29** is effected by a hydraulic drive cylinder **30** connected between the frame **20** and the underside of the conveyor table.” ‘861 patent, 2:66-3:5; “means mounting the conveyor table for movement of the forward end vertically up and down for adjustment of the height of the forward end.” ‘861 patent, 4:38-40.



Baily: “To prevent damage to the produce as it falls from the delivery end 14 of conveyor 11, the

conveyor boom is articulated at two points dividing the boom into a main boom section 16 adjacent implement 10, and an end boom pivotally mounted to the main boom section 16. Main boom 16 is mounted to the implement for pivotal movement about the horizontal axis of a pivot 17 and is powered to pivot about that axis by means of a double acting hydraulic cylinder 18. The end boom 20 is connected to the main boom 16 about the axis of a pivot 21 having an axis parallel to the axis of pivot 17. The end boom is pivoted by means of another double acting hydraulic cylinder 22. The apparatus of the present invention is utilized to control operation of the hydraulic cylinders 18 and 22 to maintain a prescribed distance between the conveyor discharge end 14 and the upper surface of the pile of material on the truck bed 13.” Baily, 3:27-54.

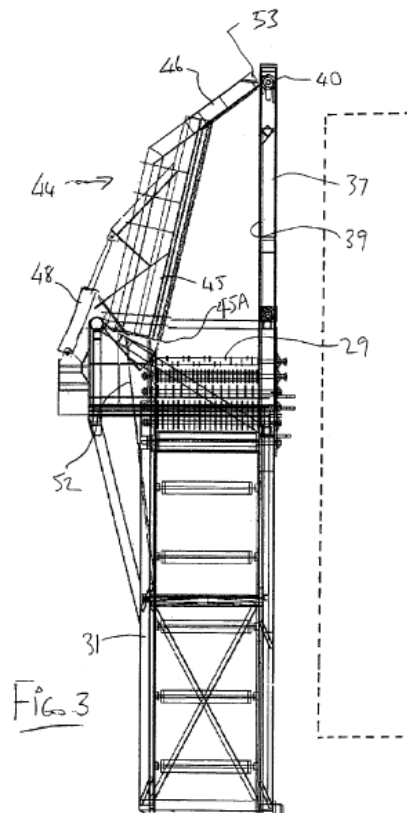
FIG 3



and a receiving bin and a conveyor carried on the frame,

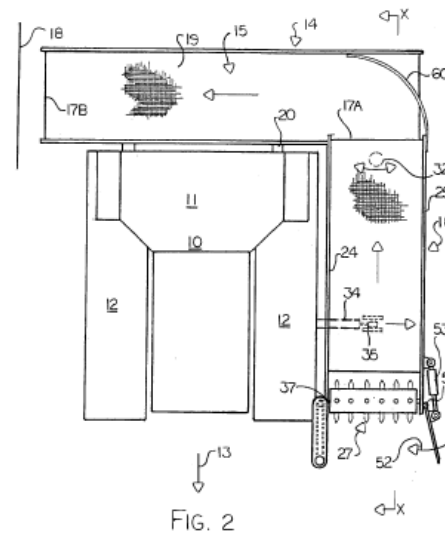
“The conveyor 15 includes a conveyer belt having a forward end 26 and a rear end 27 and is mounted on a plurality of support rollers 28 so that an upper run of the belt carries the pieces rearwardly and upwardly from the forward end 26 into the unscrambling hopper 18 at the rear end 27.” McLeod/Pisony, p. 13, ll. 8-11. “In front of the conveyer belt is provided a plurality of

picking rollers **28** arranged in a row in front of the front roller of the conveyer. ... The front picking rollers therefore act to lift the pieces off the ground or in some cases out of embedded position within the ground by the spikes of the disc engaging in the pieces and lifting them upwardly onto the top of the rollers for movement rearwardly onto the conveyer.”
McLeod/Pisony, p. 13, l. 12-p. 14, l. 9.



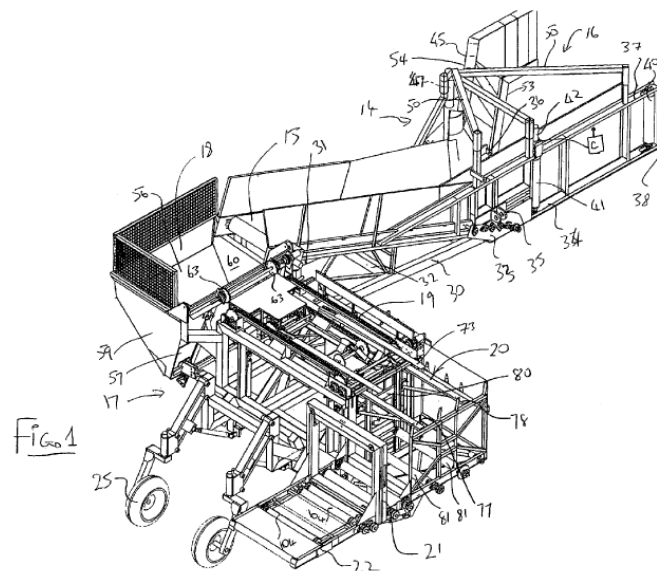
“In U.S. Pat. No. 5,934,861 issued Aug. 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2.241.682 published 26th Feb. 1999, a first proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein

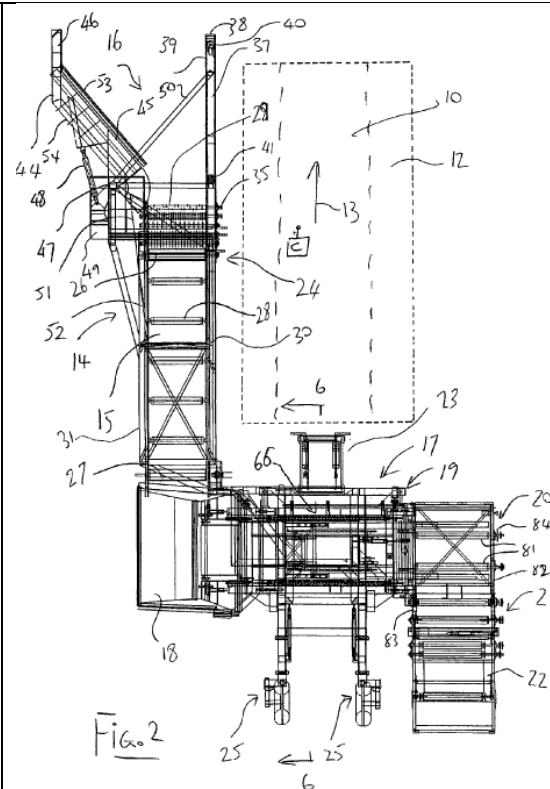
and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisony, p. 2, ll. 10-16. “The vehicle carries a picking and conveying system generally indicated at **14** including a main conveyor **15** and a conveyor table **16** feeding the main conveyor **15**. The main conveyor is mounted behind cab **11** of the vehicle from the feed end **16a** of the conveyor to a discharge end **17** of conveyor ...” ‘861 patent, 2:48-53. “The conveyor table includes a conveyor section **22** having a side belt **23** ...” ‘861 patent, 2:58-60.



the conveyor positioned between the receiving bin and the stacking assembly and being operable to move lumber from the receiving bin to the stacking assembly

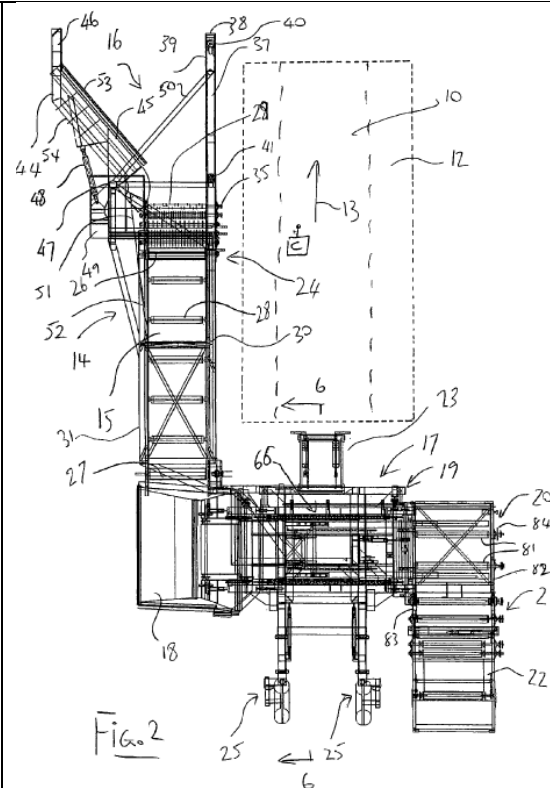
“The conveyor **15** includes a conveyor belt having a forward end **26** and a rear end **27** and is mounted on a plurality of support rollers **28** so that an upper run of the belt carries the pieces rearwardly and upwardly from the forward end **26** into the unscrambling hopper **18** at the rear end **27**.” McLeod/Pisony, p. 13, ll. 8-11





and the mast being operable to drive adjustment of the angle of the frame relative to the chassis to select the approach angle for the conveyor relative to the stacking assembly.

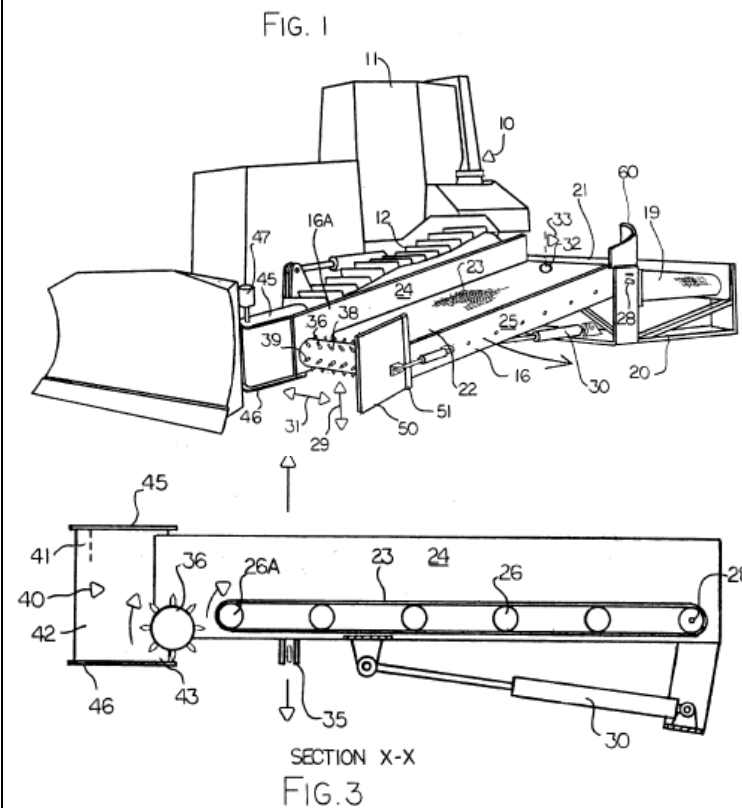
“The side wall **30** includes mounting lugs **35** and **36** for receiving support elements of a coupling **24** which connects the side of the vehicle to the sidewall **30**. The coupling element **24** includes a link which allows the frame to pivot inwardly and outwardly about a horizontal axis parallel to the direction **13** so that the picking section can pivot outwardly and upwardly or outwardly and downwardly to accommodate changes in ground contour. In addition to the angle of the bottom skid **34** about a horizontal pivot axis transverse to the direction **13** can be changed by actuating the four point hitch connection **23** and/or by lifting the linkage **24**.”
 ‘McLeod/Pisomy, p. 14ll. 17-25



“In U.S. Pat. No. 5,934,861 issued Aug. 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2.241.682 published 26th Feb. 1999, a first proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisomy, p. 2, ll. 10-16.

“The conveyor table **16** is mounted for pivotal movement about a horizontal pivot shaft **28** defining a pivot access adjacent the feed end **17a** for upward and downward vertical movement **29** of the forward end **27** of the conveyor table. Actuation of the vertical movement **29** is effected by a hydraulic drive cylinder **30** connected between the frame **20** and the underside of the conveyor table.” ‘861 patent, 2:66-3:5; “means mounting the conveyor table for movement of the

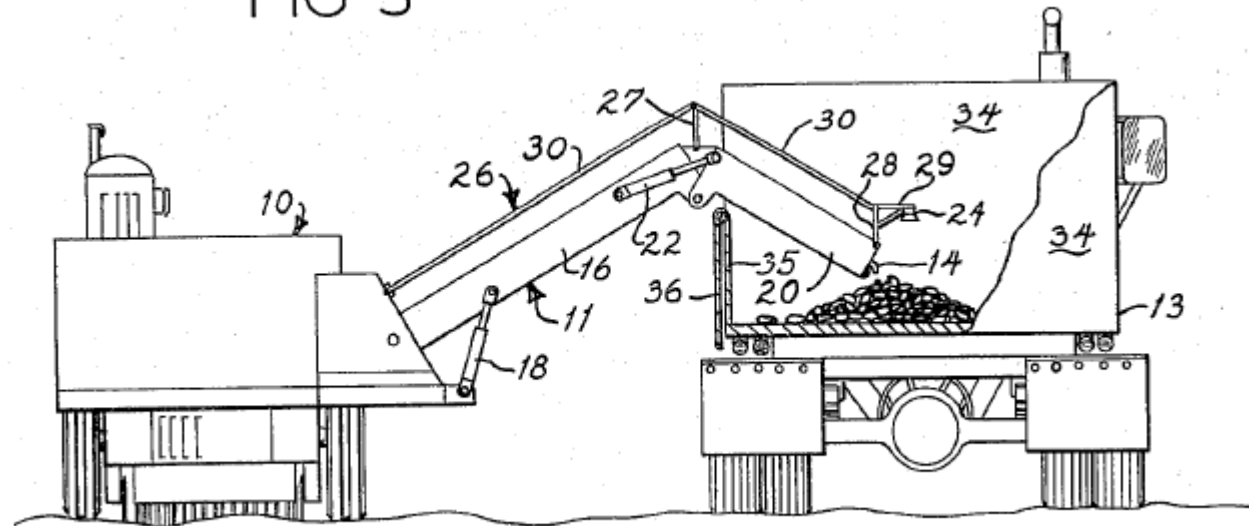
forward end vertically up and down for adjustment of the height of the forward end.” ‘861 patent, 4:38-40.



Baily: “To prevent damage to the produce as it falls from the delivery end 14 of conveyor 11, the conveyor boom is articulated at two points dividing the boom into a main boom section 16 adjacent implement 10, and an end boom pivotably mounted to the main boom section 16. Main boom 16 is mounted to the implement for pivotal movement about the horizontal axis of a pivot 17 and is powered to pivot about that axis by means of a double acting hydraulic cylinder 18. The end boom 20 is connected to the main boom 16 about the axis of a pivot 21 having an axis parallel to the axis of pivot 17. The end boom is pivoted by means of another double acting

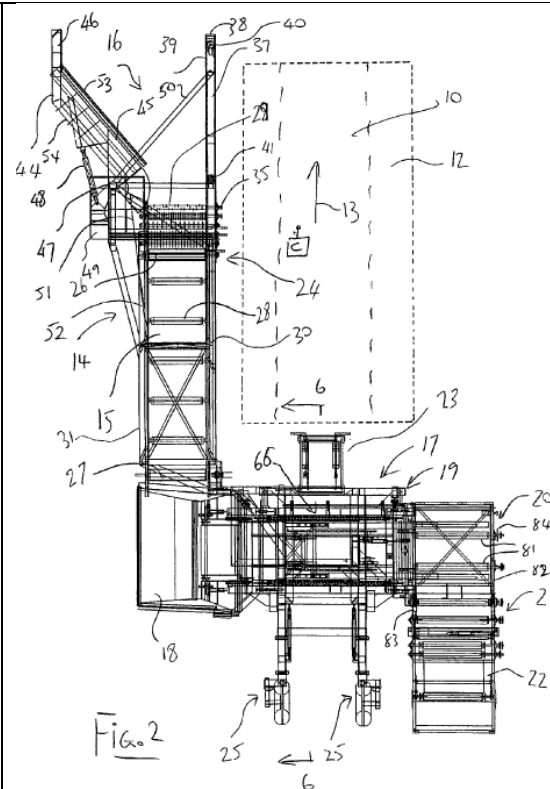
hydraulic cylinder 22. The apparatus of the present invention is utilized to control operation of the hydraulic cylinders 18 and 22 to maintain a prescribed distance between the conveyor discharge end 14 and the upper surface of the pile of material on the truck bed 13.” Bailly, 3:27-54.

FIG 3

**Claim 2**

The apparatus of claim 1 wherein the mast drives the frame adjacent the receiving bin to select a spacing between the frame and the chassis.

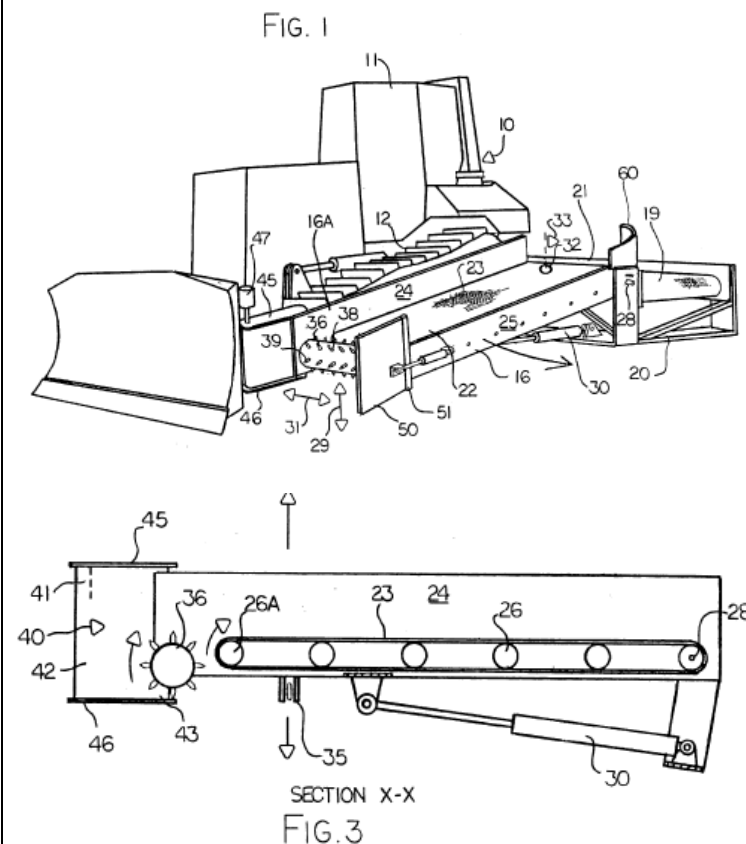
“The side wall 30 includes mounting lugs 35 and 36 for receiving support elements of a coupling 24 which connects the side of the vehicle to the sidewall 30. The coupling element 24 includes a link which allows the frame to pivot inwardly and outwardly about a horizontal axis parallel to the direction 13 so that the picking section can pivot outwardly and upwardly or outwardly and downwardly to accommodate changes in ground contour. In addition to the angle of the bottom skid 34 about a horizontal pivot axis transverse to the direction 13 can be changed by actuating the four point hitch connection 23 and/or by lifting the linkage 24.” McLeod/Pisony, p. 14, 17-25.



“In U.S. Pat. No. 5,934,861 issued Aug. 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2.241.682 published 26th Feb. 1999, a first proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisomy, p. 2, ll. 10-16.

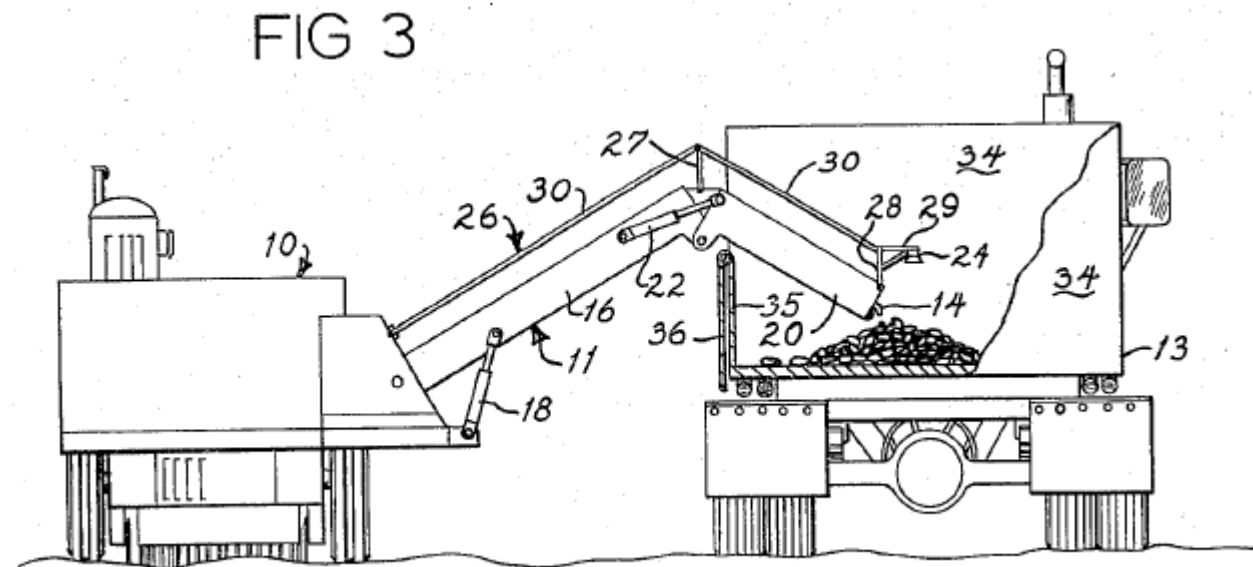
“The conveyor table **16** is mounted for pivotal movement about a horizontal pivot shaft **28** defining a pivot access adjacent the feed end **17a** for upward and downward vertical movement **29** of the forward end **27** of the conveyor table. Actuation of the vertical movement **29** is effected by a hydraulic drive cylinder **30** connected between the frame **20** and the underside of the conveyor table.” ‘861 patent, 2:66-3:5; “means mounting the conveyor table for movement of the

forward end vertically up and down for adjustment of the height of the forward end.” ‘861 patent, 4:38-40.



Baily: “To prevent damage to the produce as it falls from the delivery end 14 of conveyor 11, the conveyor boom is articulated at two points dividing the boom into a main boom section 16 adjacent implement 10, and an end boom pivotably mounted to the main boom section 16. Main boom 16 is mounted to the implement for pivotal movement about the horizontal axis of a pivot 17 and is powered to pivot about that axis by means of a double acting hydraulic cylinder 18. The end boom 20 is connected to the main boom 16 about the axis of a pivot 21 having an axis

parallel to the axis of pivot 17. The end boom is pivoted by means of another double acting hydraulic cylinder 22. The apparatus of the present invention is utilized to control operation of the hydraulic cylinders 18 and 22 to maintain a prescribed distance between the conveyor discharge end 14 and the upper surface of the pile of material on the truck bed 13.” Bailey, 3:27-54.

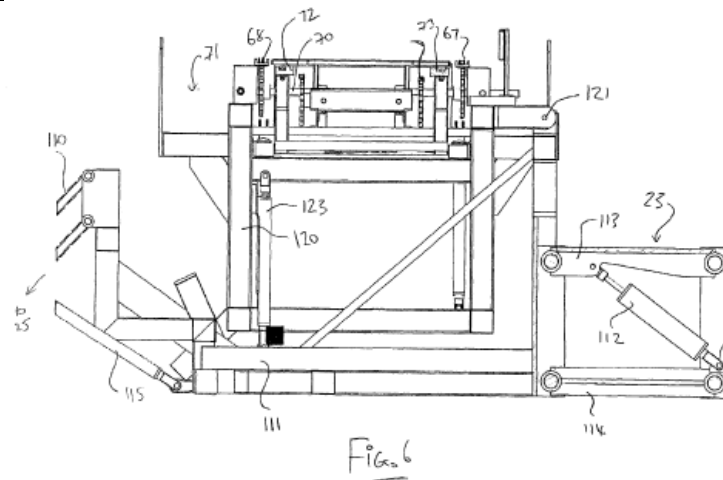


Claim 4

The apparatus of claim 1 wherein the stacking assembly further includes a pivoting arrangement for tilting the stacking assembly relative to the chassis to provide for substantial leveling of the stacking assembly when operating on uneven

“[T]he stacking section included in the conveyor 66 and the stacking arms on the vertical conveyor of the stacking assembly is mounted on a subframe section 120 separate from the frame section 111 and pivotally connected to the frame section 111 on a pivot pin 121. The height of the stacking section relative to the frame section 111 can be adjusted by a cylinder 123 under control of the operator standing on the frame 71. Thus the stacking section can be maintained substantially horizontal relative to a front to rear direction by pivoting action about the horizontal transverse pivot pin 121.” McLeod/Pisomy, p. 24, l-p. 25, l. 6.

ground surfaces.



“The apparatus of claim 11 wherein the stacking assembly and the bundling assembly are mounted on a sub-frame portion of the frame which is arranged for pivotal movement relative to the frame and relative to the conveyor about a horizontal axis transverse to the direction of the movement of the vehicle to maintain the stacking assembly and bundling assembly substantially level as the vehicle moves.” McLeod/Pisony, p. 31, ll. 11-16.

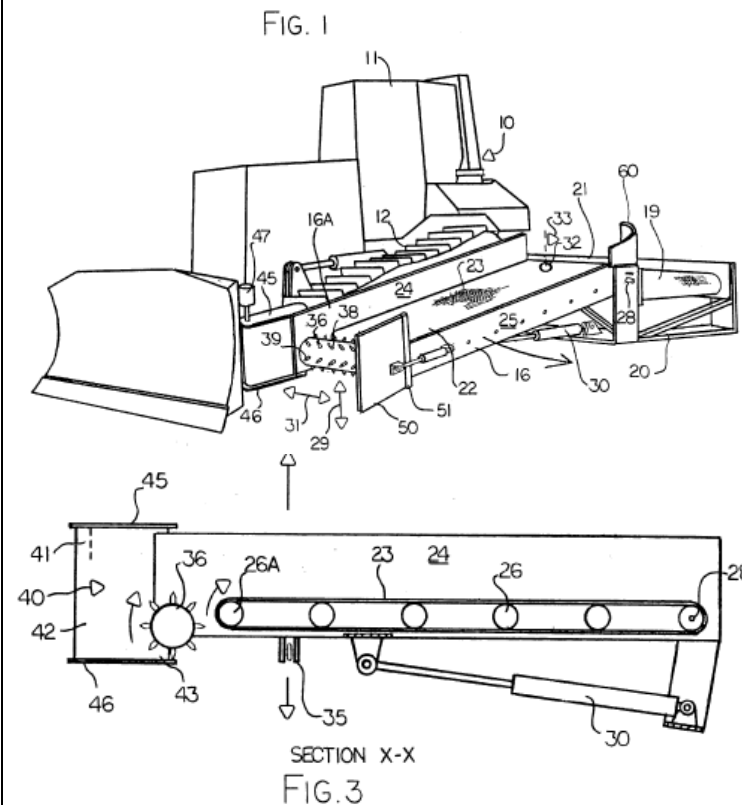
Claim 6

The apparatus of claim 1 wherein the mast includes a hydraulic cylinder drivable to telescope to various lengths.

“In U.S. Pat. No. 5,934,861 issued Aug. 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2.241.682 published 26th Feb. 1999, a first proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisony, p. 2, ll. 10-16.

“The conveyor table **16** is mounted for pivotal movement about a horizontal pivot shaft **28** defining a pivot access adjacent the feed end **17a** for upward and downward vertical movement **29** of the forward end **27** of the conveyor table. Actuation of the vertical movement **29** is effected by a hydraulic drive cylinder **30** connected between the frame **20** and the underside of the conveyor table.” ‘861 patent, 2:66-3:5; “means mounting the conveyor table for movement of the forward end vertically up and down for adjustment of the height of the forward end.” ‘861

patent, 4:38-40;



Baily: “To prevent damage to the produce as it falls from the delivery end 14 of conveyor 11, the conveyor boom is articulated at two points dividing the boom into a main boom section 16 adjacent implement 10, and an end boom pivotably mounted to the main boom section 16. Main boom 16 is mounted to the implement for pivotal movement about the horizontal axis of a pivot 17 and is powered to pivot about that axis by means of a double acting hydraulic cylinder 18. The end boom 20 is connected to the main boom 16 about the axis of a pivot 21 having an axis parallel to the axis of pivot 17. The end boom is pivoted by means of another double acting hydraulic cylinder 22. The apparatus of the present invention is utilized to control operation of

the hydraulic cylinders 18 and 22 to maintain a prescribed distance between the conveyor discharge end 14 and the upper surface of the pile of material on the truck bed 13.” Bailey, 3:27-54.

FIG 3

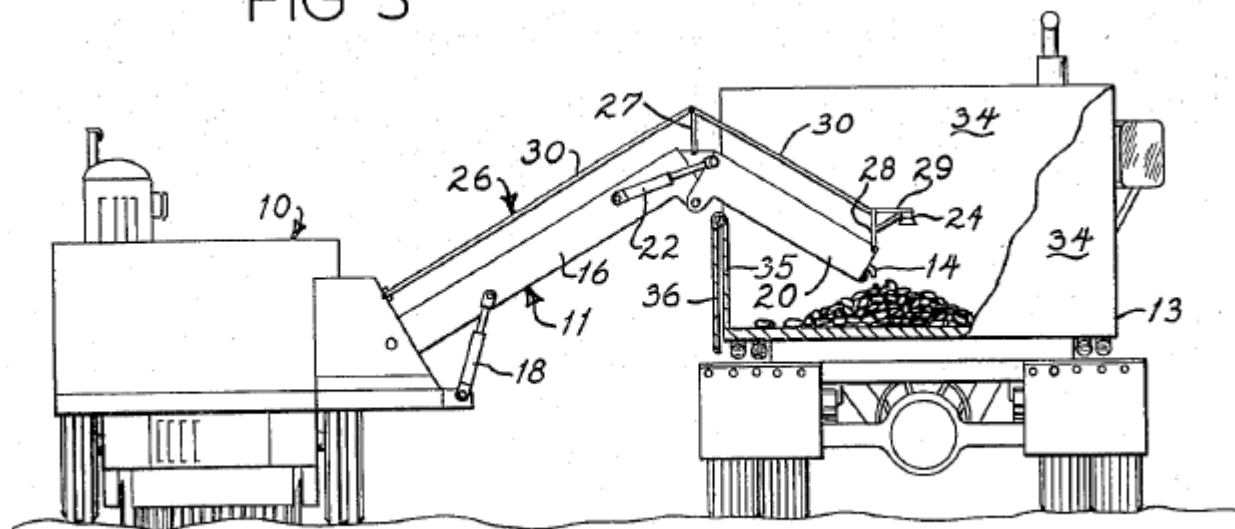
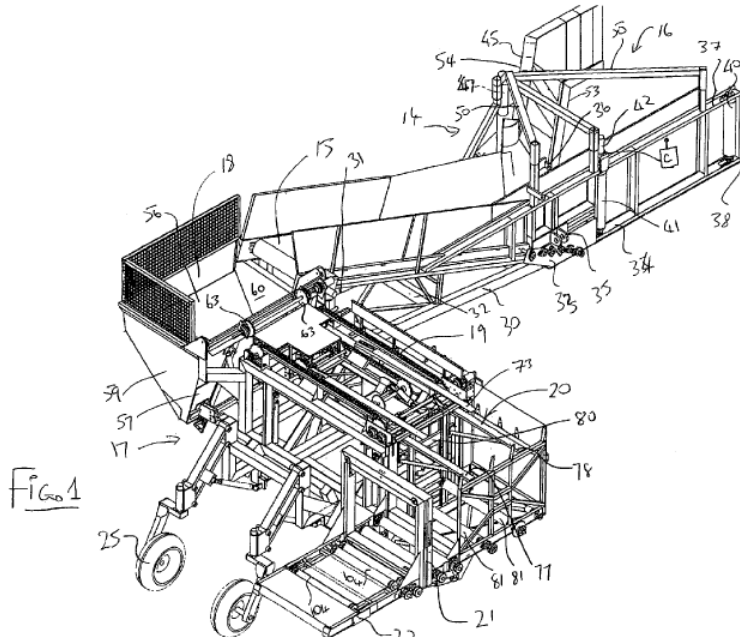
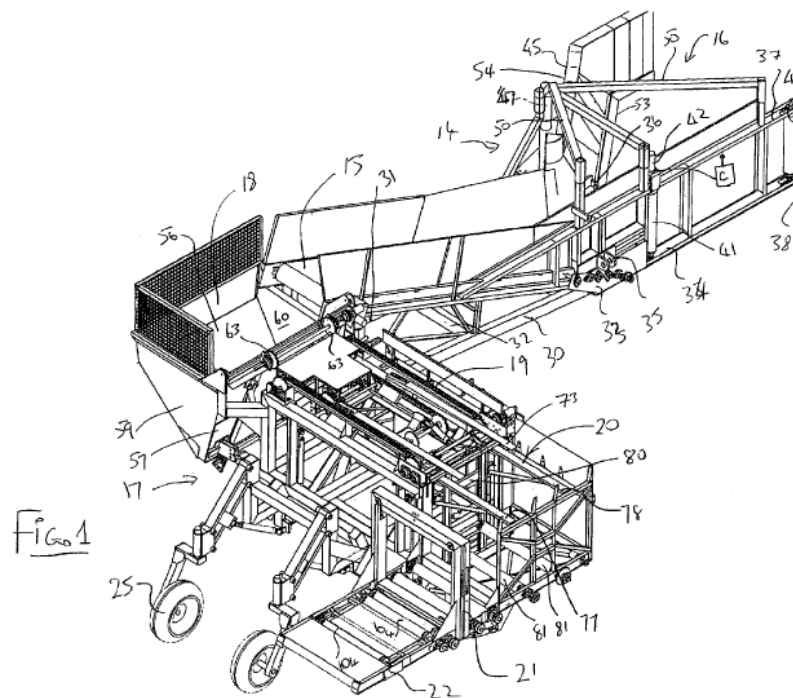


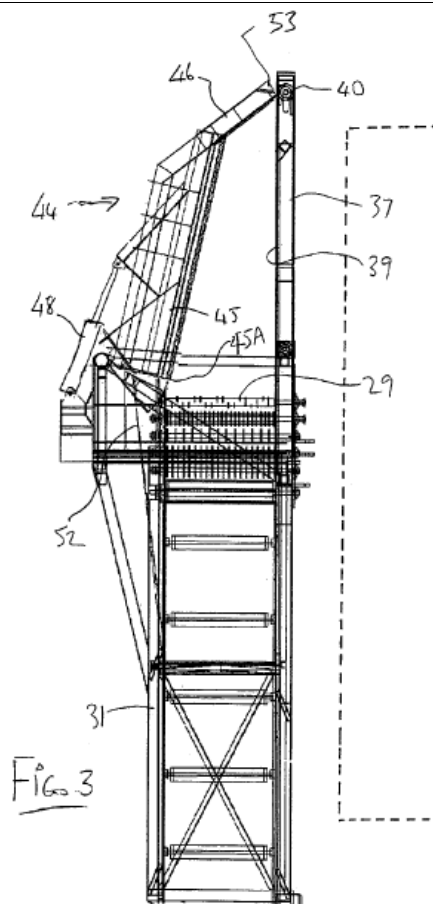
EXHIBIT J

Invalidity Contentions Claim Chart for U.S. Patent No. 7,591,629
Claims 1, 2, 4 and 6 in view of McLeod/Pisony and Swisher under 35 U.S.C. § 103

Claim 1	McLeod/Pisony and Swisher
An apparatus for picking up, stacking and bundling lumber, comprising:	The preamble is not a limitation. However, to the extent it could be construed to be a limitation, the '202 patent discloses an apparatus for picking up, stacking and bundling lumber": "[a]n apparatus for picking, conveying, stacking and bundling lumber pieces from the grounds ..." McLeod/Pisony, Abstract (57)
(a) a chassis,	"The elements provided by the picking and conveyer assembly 14 , the stacking assembly 17 and the bundling assembly 21 are all mounted on a frame for common movement with the vehicle 10 in the working direction 13 . The frame carrying these elements is attached to the vehicle by a four point hitch 23 at the rear of the vehicle and by coupling assembly generally indicated at 24 at the side of the vehicle and inwardly of the picking and conveyer assembly 14 . McLeod/Pisony, p. 11, l. 23-p. 12, l. 3.

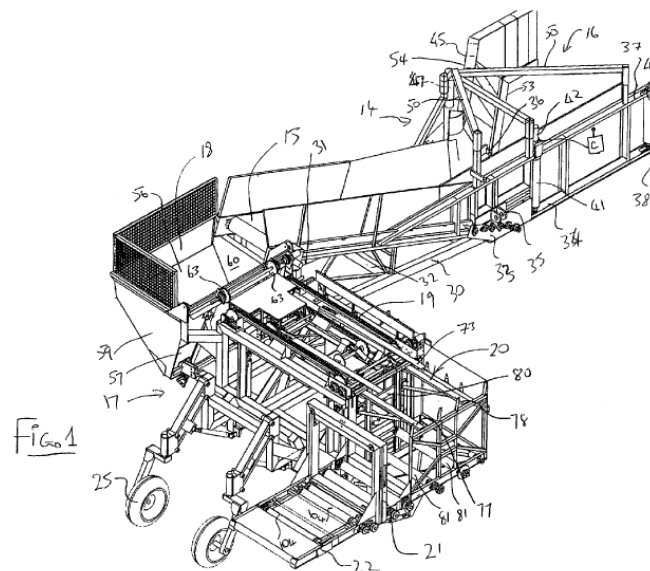
	
(b) a grapple carried with the chassis,	<p>“Such an arrangement can also be used with a picking assembly in the form of a mechanically operated grapple which lifts the pieces from a large pile of the pieces for formation into stacks which are bundled and discharged. Again therefore this device in combination with a grapple type picking assembly is portable on a suitable trailer or frame carried by a vehicle so that it can be moved to a pile or collection of the piecing for stacking.” ‘McLeod/Pisony, p. 13, ll. 2-7.</p>
(c) a conveyor assembly supported on the chassis,	<p>“The apparatus further includes a picking and conveyer assembly 14 having a main conveyer 15 attached to and arranged rearwardly of a picker 16.” ‘202 patent, 4:45-47. The elements provided by the picking and conveyer assembly 14, the stacking assembly 17 and the bundling assembly 21 are all mounted on a frame for common movement with the vehicle 10 in the working direction 13. McLeod/Pisony, p. 11, ll. 18-25.</p>

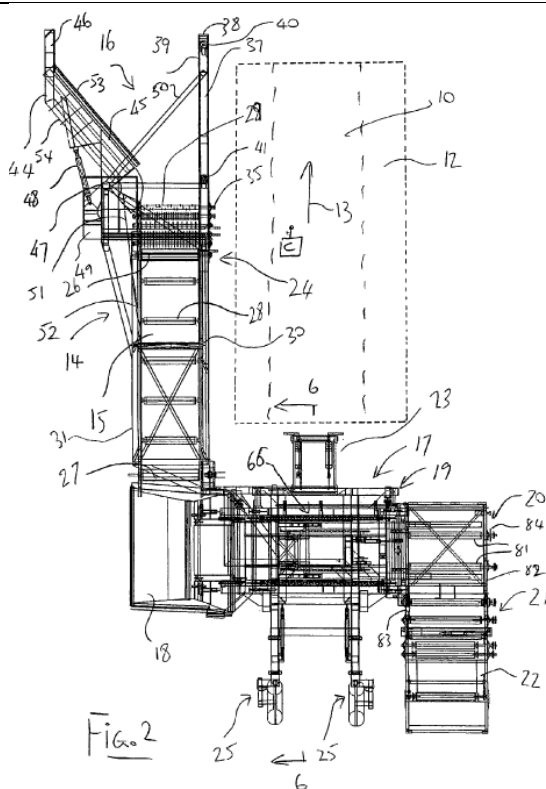




(d)) a stacking assembly operatively connected adjacent the conveyor assembly, the stacking assembly including an unscrambling hopper, a row conveyor, a stacking bin and a bundling assembly, and,

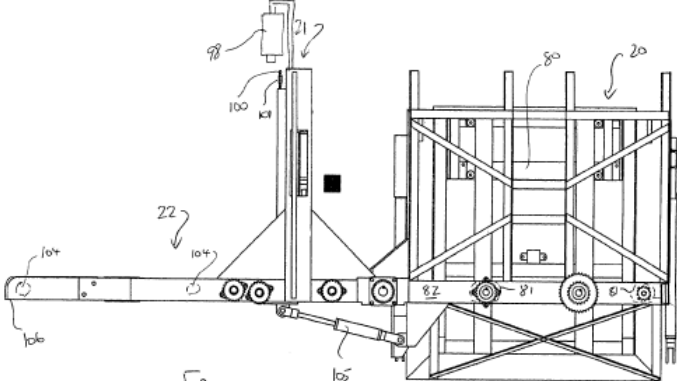
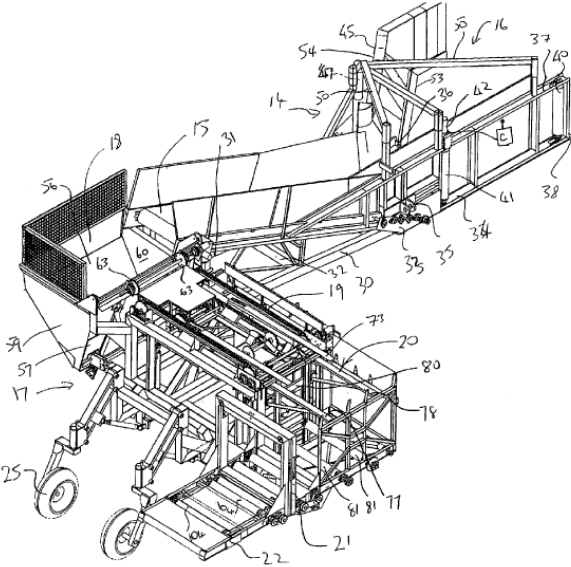
“At the rear of the conveyer **15** is provided a stacking assembly **14** generally indicated at **17** including an unscrambling hopper **18**, a row conveyer **19** and a stacking assembly **20**. The apparatus further including a bundling assembly **21** including a discharge ramp **22**.” ‘202 patent, 4:47-52. The elements provided by the picking and conveyer assembly **14**, the stacking assembly **17** and the bundling assembly **21** are all mounted on a frame for common movement with the vehicle **10** in the working direction **13**. McLeod/Pisomy, p. 11, ll. 19-25.





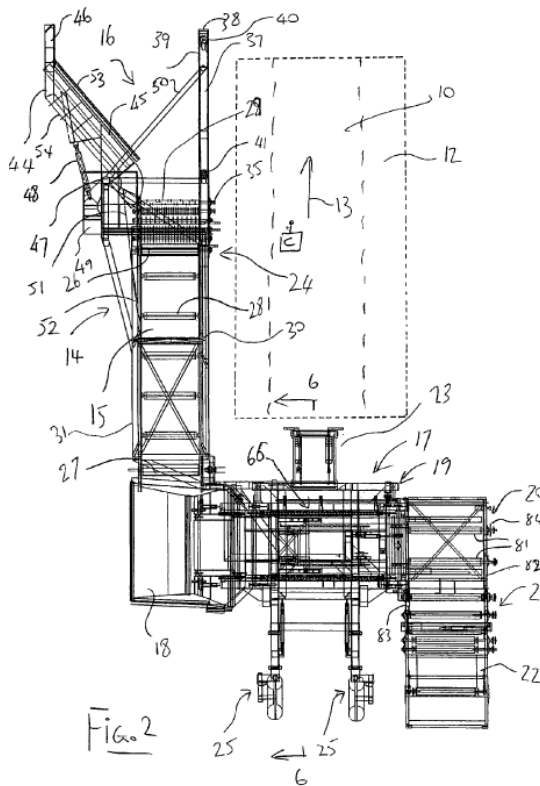
(e) a discharge platform operatively connected adjacent the bundling assembly,

The apparatus further including a bundling assembly **21** including a discharge ramp **22.**" McLeod/Pisomy, p. 11, ll. 22-23.

	 <p>Fig. 7</p>
<p>(f) wherein the conveyor assembly includes a frame,</p>	<p>“The conveyer is mounted on a frame section of the main frame having a first side 30 and a second side 31. McLeod/Pisony, p. 14, ll. 10-12.</p>  <p>Fig. 4</p>
<p>a pivotal connection for the frame to permit angular adjustment of the</p>	<p>“The side wall 30 includes mounting lugs 35 and 36 for receiving support elements of a coupling 24 which connects the side of the vehicle to the sidewall 30. The coupling</p>

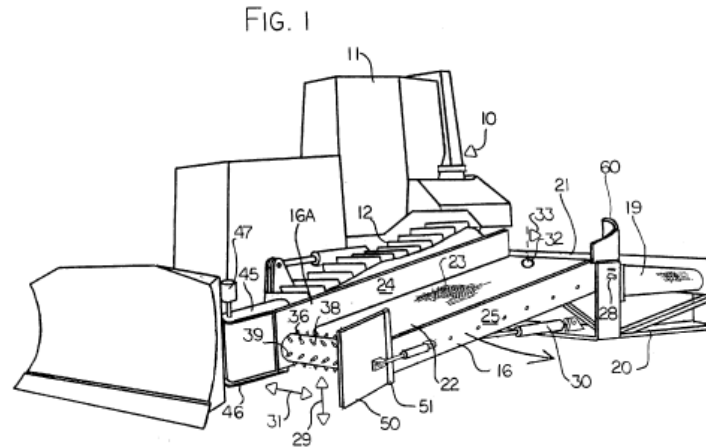
frame relative to the chassis,

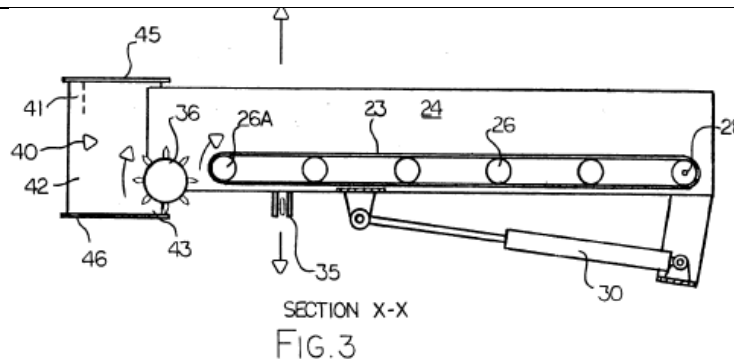
element **24** includes a link which allows the frame to pivot inwardly and outwardly about a horizontal axis parallel to the direction **13** so that the picking section can pivot outwardly and upwardly or outwardly and downwardly to accommodate changes in ground contour. In addition to the angle of the bottom skid **34** about a horizontal pivot axis transverse to the direction **13** can be changed by actuating the four point hitch connection **23** and/or by lifting the linkage **24**.” McLeod/Pisony, p. 14, ll. 19-25.



“In US patent 5934861 issued August 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2241682 published 26th February 1999, a first proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of

basic principles which are used herein and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisony, p. 2, ll. 10-16. “The conveyer table **16** is mounted for pivotal movement about a horizontal pivot shaft **28** defining a pivot access adjacent the feed end **17a** for upward and downward vertical movement **29** of the forward end **27** of the conveyer table. Actuation of the vertical movement **29** is effected by a hydraulic drive cylinder **30** connected between the frame **20** and the underside of the conveyer table.” ‘861 patent, 2:66-3:5; “means mounting the conveyor table for movement of the forward end vertically up and down for adjustment of the height of the forward end.” ‘861 patent, 4:38-40.

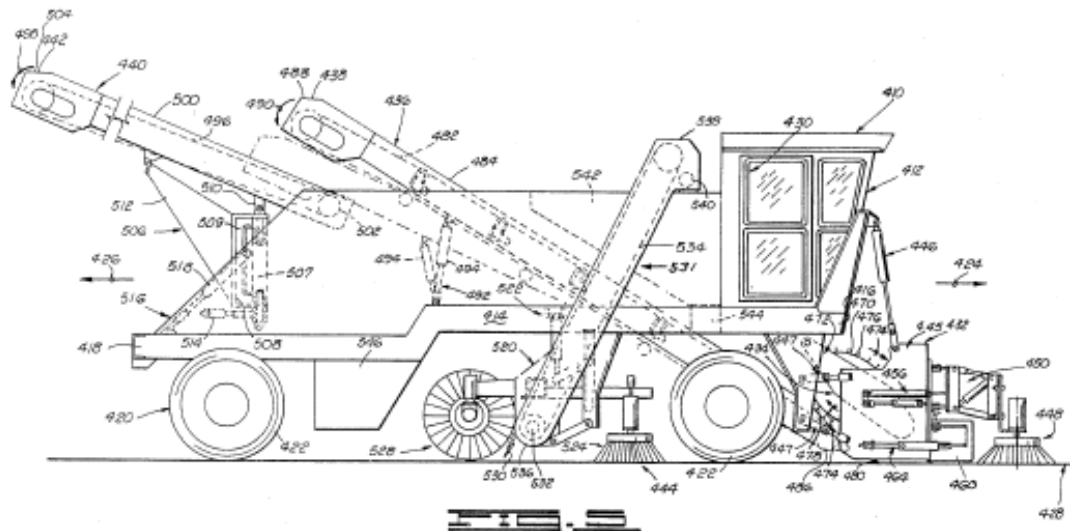




Swisher: “The elevator assembly 30 further comprises a support placement assembly 214 which permits selective movement of the material lifting conveyor 204 between a first (or raised) mode and a second (or lowered) mode. In the first mode (shown in solid lines in FIG. 2) the discharge end 32 of the material lifting conveyor 204 is elevated; and in the second mode (shown in dashed lines in FIG. 2) the discharge end 32 of the material lifting conveyor 204 is lowered. As shown in FIGS. 1 and 2, the support placement assembly 214 comprises a folding stabilizer assembly 216. The support placement assembly prevents twisting and side-to-side movement of the material lifting conveyor 204. The support placement assembly 214 includes an upper cross frame 218 and a lower cross frame 220. The upper cross frame 218 comprises a pair of parallel side members, such as side member 219. The parallel side members of the upper cross frame 218 are pivotally connected at one end thereof to the sides of the material lifting conveyor 204; and the other ends of the parallel side members are interconnected by a cross brace 224.” Swisher, 11:”12-32. “The support placement assembly 214 further comprises a pair of hydraulic cylinders, such as hydraulic cylinder 222. The hydraulic cylinders are disposed on each side of the material lifting conveyor 204 such that upon activation of the hydraulic cylinders the material lifting conveyor 204 is moved between the first mode (raised position) and the second mode (lowered position). Each hydraulic cylinder, such as hydraulic cylinder 222, is pivotally attached at its base to the main frame 36, while the piston rod carried by each hydraulic cylinder is pivotally attached to the material lifting conveyor 204. The hydraulic cylinders are connected in parallel to a conventional hydraulic power source

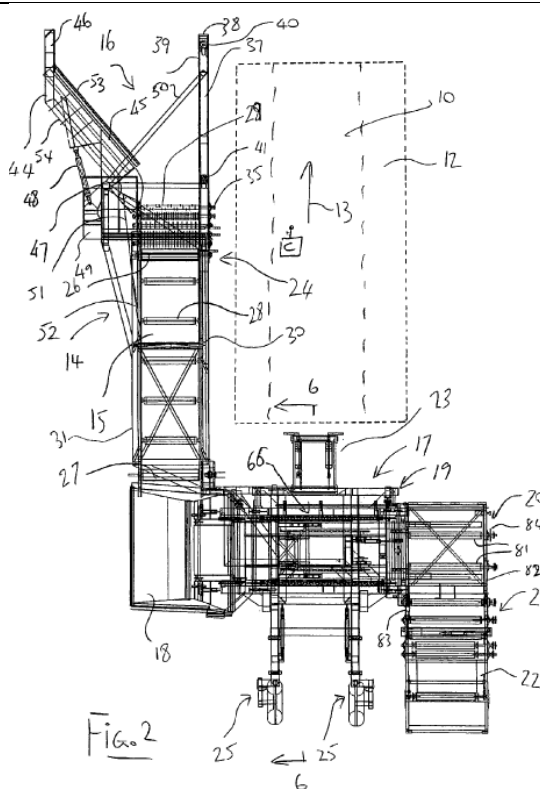
(not shown) so that the piston rods may be extended or retracted as required to position the material lifting conveyor 204 in the first mode or in the second mode.” Swisher, 11:43-58.

“The first elevator assembly 436 further comprises a first support placement assembly 492 which permits selective pivotal movement of the first material lifting conveyor 482 between a first mode and in a second mode. When the first material lifting conveyor 482 is in the first mode, the second end 488 of the conveyor is elevated to the position depicted in FIG. 5; whereas, when the material lifting conveyor 482 is in the second mode (shown in phantom lines in FIG. 5) the second end 488 of the first material lifting conveyor 482 is retracted. The first support placement assembly 492 comprises a pair of hydraulic cylinders, such as hydraulic cylinder 494. The hydraulic cylinders are disposed on each side of the first material lifting conveyor 482. Each hydraulic cylinder, such as the hydraulic cylinder 494, is pivotally attached at its base to the first material lifting conveyor 482, while the piston rod carried by each hydraulic cylinder is pivotally attached to the main frame 414. The hydraulic cylinders are connected in parallel to a conventional hydraulic power source (not shown) so that the piston rods may be extended or retracted as required to position the first material lifting conveyor 482 in the first mode or in the second mode.” Swisher, 20:24-46.



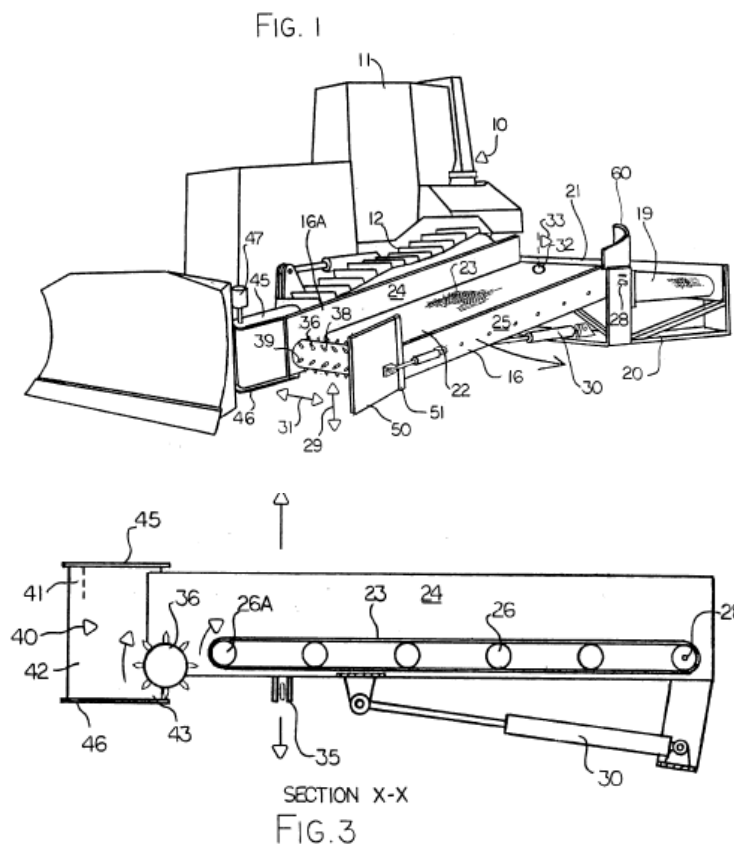
an extendible mast connected between the frame and the chassis to drive the frame about the pivotal connection

“The side wall **30** includes mounting lugs **35** and **36** for receiving support elements of a coupling **24** which connects the side of the vehicle to the sidewall **30**. The coupling element **24** includes a link which allows the frame to pivot inwardly and outwardly about a horizontal axis parallel to the direction **13** so that the picking section can pivot outwardly and upwardly or outwardly and downwardly to accommodate changes in ground contour. In addition to the angle of the bottom skid **34** about a horizontal pivot axis transverse to the direction **13** can be changed by actuating the four point hitch connection **23** and/or by lifting the linkage **24**.” McLeod/Pisony, p. 14, ll. 17-25.



“In U.S. Pat. No. 5,934,861 issued Aug. 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2.241.682 published 26th Feb. 1999, a first proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisomy, p. 2, ll. 10-16. “The conveyor table **16** is mounted for pivotal movement about a horizontal pivot shaft **28** defining a pivot access adjacent the feed end **17a** for upward and downward vertical movement **29** of the forward end **27** of the conveyor table. Actuation of the vertical movement **29** is effected by a hydraulic drive cylinder **30** connected between the frame **20** and the

underside of the conveyer table.” ‘861 patent, 2:66-3:5; “means mounting the conveyer table for movement of the forward end vertically up and down for adjustment of the height of the forward end.” ‘861 patent, 4:38-40.

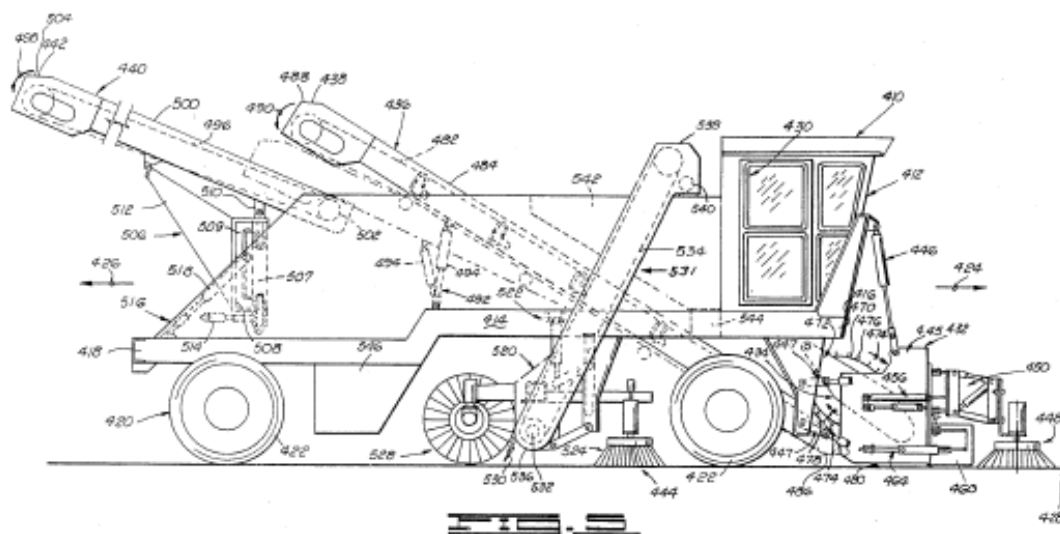


Swisher: “The elevator assembly 30 further comprises a support placement assembly 214 which permits selective movement of the material lifting conveyor 204 between a first (or raised) mode and a second (or lowered) mode. In the first mode (shown in solid lines in FIG. 2) the discharge end 32 of the material lifting conveyor 204 is

elevated; and in the second mode (shown in dashed lines in FIG. 2) the discharge end 32 of the material lifting conveyor 204 is lowered. As shown in FIGS. 1 and 2, the support placement assembly 214 comprises a folding stabilizer assembly 216. The support placement assembly prevents twisting and side-to-side movement of the material lifting conveyor 204. The support placement assembly 214 includes an upper cross frame 218 and a lower cross frame 220. The upper cross frame 218 comprises a pair of parallel side members, such as side member 219. The parallel side members of the upper cross frame 218 are pivotally connected at one end thereof to the sides of the material lifting conveyor 204; and the other ends of the parallel side members are interconnected by a cross brace 224.” Swisher, 11:”12-32. “The support placement assembly 214 further comprises a pair of hydraulic cylinders, such as hydraulic cylinder 222. The hydraulic cylinders are disposed on each side of the material lifting conveyor 204 such that upon activation of the hydraulic cylinders the material lifting conveyor 204 is moved between the first mode (raised position) and the second mode (lowered position). Each hydraulic cylinder, such as hydraulic cylinder 222, is pivotally attached at its base to the main frame 36, while the piston rod carried by each hydraulic cylinder is pivotally attached to the material lifting conveyor 204. The hydraulic cylinders are connected in parallel to a conventional hydraulic power source (not shown) so that the piston rods may be extended or retracted as required to position the material lifting conveyor 204 in the first mode or in the second mode.” Swisher, 11:43-58.

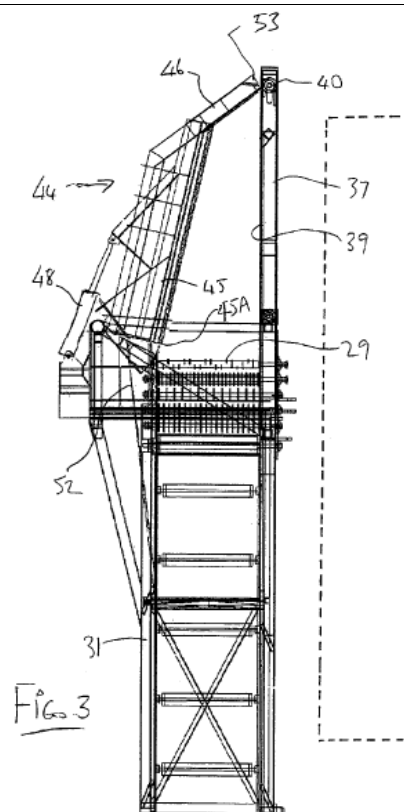
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cylinder is pivotally attached to the main frame 414. The hydraulic cylinders are connected in parallel to a conventional hydraulic power source (not shown) so that the piston rods may be extended or retracted as required to position the first material lifting conveyor 482 in the first mode or in the second mode.” Swisher, 20:24-46.



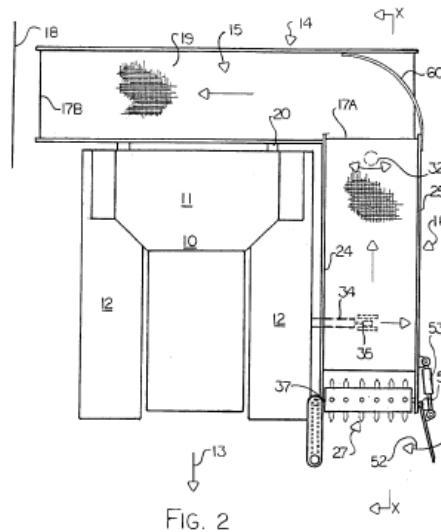
and a receiving bin and a conveyor carried on the frame,

“The conveyor **15** includes a conveyor belt having a forward end **26** and a rear end **27** and is mounted on a plurality of support rollers **28** so that an upper run of the belt carries the pieces rearwardly and upwardly from the forward end **26** into the unscrambling hopper **18** at the rear end **27**.” McLeod/Pisony, p. 13, ll. 8-11. “In front of the conveyor belt is provided a plurality of picking rollers **28** arranged in a row in front of the front roller of the conveyor. ... The front picking rollers therefore act to lift the pieces off the ground or in some cases out of embedded position within the ground by the spikes of the disc engaging in the pieces and lifting them upwardly onto the top of the rollers for movement rearwardly onto the conveyor.” McLeod/Pisony, p. 13, l. 12-p. 14, l. 9.



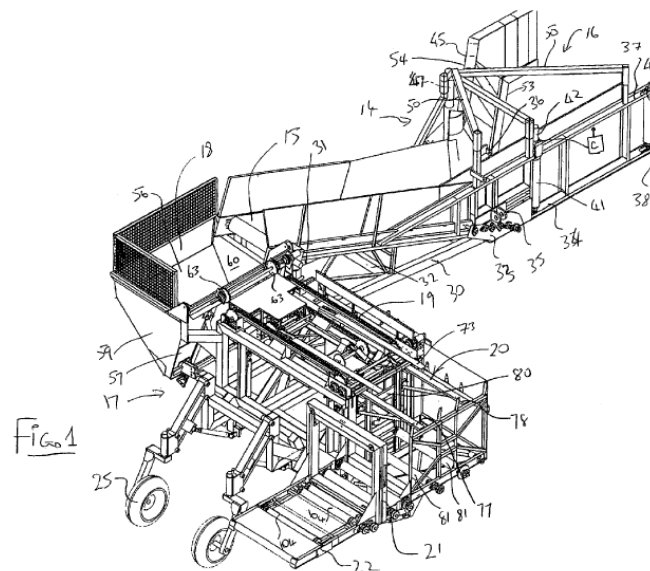
“In U.S. Pat. No. 5,934,861 issued Aug. 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2.241.682 published 26th Feb. 1999, a first proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisony, p. 2, ll. 10-16. “The vehicle carries a picking and conveying system generally indicated at **14** including a main conveyor **15** and a conveyer table **16** feeding the main conveyor **15**. The main conveyor is mounted behind cab **11** of the vehicle from the feed end **16a** of the conveyor to a discharge end

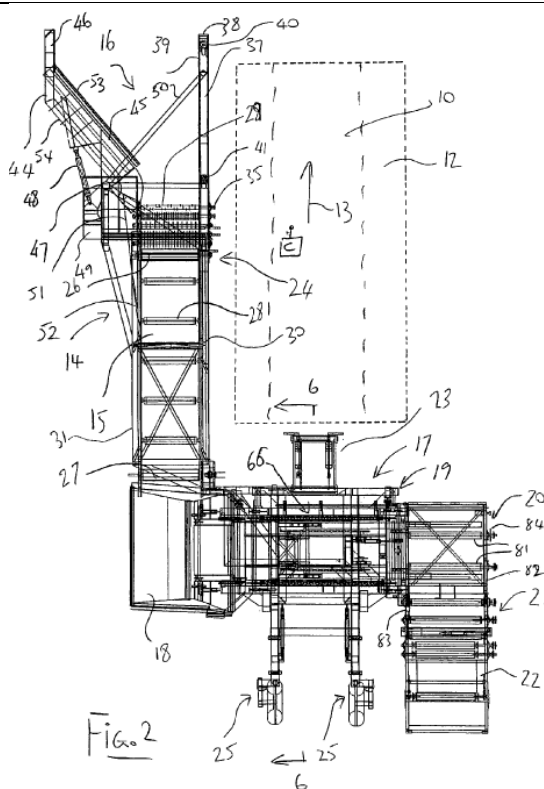
17 of conveyer ...” ‘861 patent, 2:48-53. “The conveyer table includes a conveyer section **22** having a side belt **23** ...” ‘861 patent, 2:58-60.



the conveyer positioned between the receiving bin and the stacking assembly and being operable to move lumber from the receiving bin to the stacking assembly

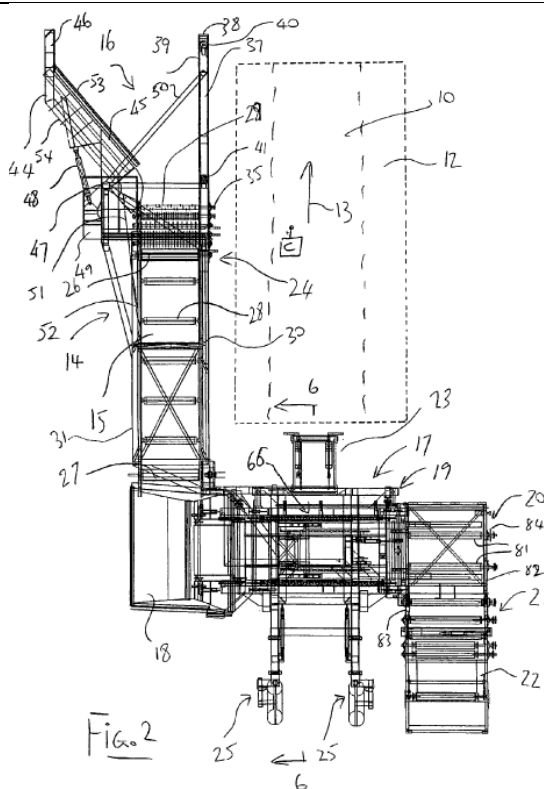
“The conveyor **15** includes a conveyer belt having a forward end **26** and a rear end **27** and is mounted on a plurality of support rollers **28** so that an upper run of the belt carries the pieces rearwardly and upwardly from the forward end **26** into the unscrambling hopper **18** at the rear end **27**.” McLeod/Pisony, p. 13, ll. 8-11





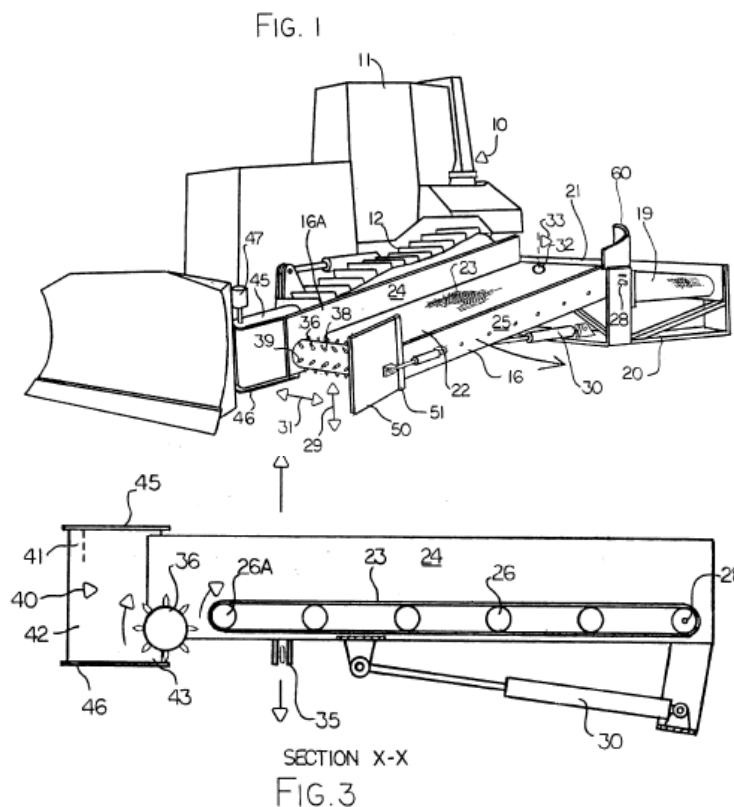
and the mast being operable to drive adjustment of the angle of the frame relative to the chassis to select the approach angle for the conveyer relative to the stacking assembly.

“The side wall **30** includes mounting lugs **35** and **36** for receiving support elements of a coupling **24** which connects the side of the vehicle to the sidewall **30**. The coupling element **24** includes a link which allows the frame to pivot inwardly and outwardly about a horizontal axis parallel to the direction **13** so that the picking section can pivot outwardly and upwardly or outwardly and downwardly to accommodate changes in ground contour. In addition to the angle of the bottom skid **34** about a horizontal pivot axis transverse to the direction **13** can be changed by actuating the four point hitch connection **23** and/or by lifting the linkage **24**.” ‘McLeod/Pisomy, p. 14ll. 17-25



“In U.S. Pat. No. 5,934,861 issued Aug. 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2.241.682 published 26th Feb. 1999, a first proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisomy, p. 2, ll. 10-16. “The conveyor table **16** is mounted for pivotal movement about a horizontal pivot shaft **28** defining a pivot access adjacent the feed end **17a** for upward and downward vertical movement **29** of the forward end **27** of the conveyor table. Actuation of the vertical movement **29** is effected by a hydraulic drive cylinder **30** connected between the frame **20** and the

underside of the conveyer table.” ‘861 patent, 2:66-3:5; “means mounting the conveyer table for movement of the forward end vertically up and down for adjustment of the height of the forward end.” ‘861 patent, 4:38-40.

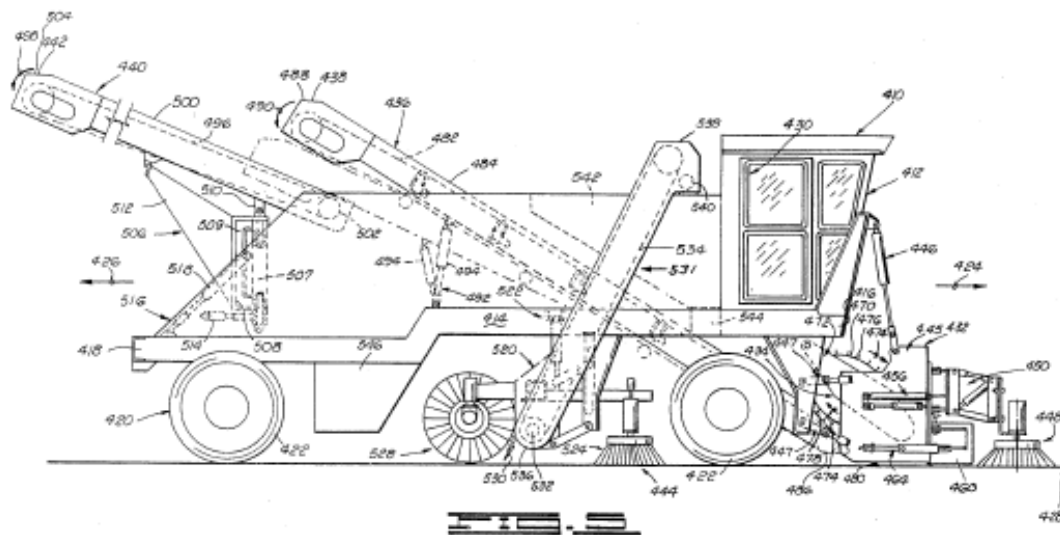


Swisher: “The elevator assembly 30 further comprises a support placement assembly 214 which permits selective movement of the material lifting conveyor 204 between a first (or raised) mode and a second (or lowered) mode. In the first mode (shown in solid lines in FIG. 2) the discharge end 32 of the material lifting conveyor 204 is elevated; and in the second mode (shown in dashed lines in FIG. 2) the discharge end 32 of the material lifting conveyor 204 is lowered. As shown in FIGS. 1 and 2, the

support placement assembly 214 comprises a folding stabilizer assembly 216. The support placement assembly prevents twisting and side-to-side movement of the material lifting conveyor 204. The support placement assembly 214 includes an upper cross frame 218 and a lower cross frame 220. The upper cross frame 218 comprises a pair of parallel side members, such as side member 219. The parallel side members of the upper cross frame 218 are pivotally connected at one end thereof to the sides of the material lifting conveyor 204; and the other ends of the parallel side members are interconnected by a cross brace 224.” Swisher, 11:”12-32. “The support placement assembly 214 further comprises a pair of hydraulic cylinders, such as hydraulic cylinder 222. The hydraulic cylinders are disposed on each side of the material lifting conveyor 204 such that upon activation of the hydraulic cylinders the material lifting conveyor 204 is moved between the first mode (raised position) and the second mode (lowered position). Each hydraulic cylinder, such as hydraulic cylinder 222, is pivotally attached at its base to the main frame 36, while the piston rod carried by each hydraulic cylinder is pivotally attached to the material lifting conveyor 204. The hydraulic cylinders are connected in parallel to a conventional hydraulic power source (not shown) so that the piston rods may be extended or retracted as required to position the material lifting conveyor 204 in the first mode or in the second mode.” Swisher, 11:43-58.

“The first elevator assembly 436 further comprises a first support placement assembly 492 which permits selective pivotal movement of the first material lifting conveyor 482 between a first mode and in a second mode. When the first material lifting conveyor 482 is in the first mode, the second end 488 of the conveyor is elevated to the position depicted in FIG. 5; whereas, when the material lifting conveyor 482 is in the second mode (shown in phantom lines in FIG. 5) the second end 488 of the first material lifting conveyor 482 is retracted. The first support placement assembly 492 comprises a pair of hydraulic cylinders, such as hydraulic cylinder 494. The hydraulic cylinders are disposed on each side of the first material lifting conveyor 482. Each hydraulic cylinder, such as the hydraulic cylinder 494, is pivotally attached at its base to the first material lifting conveyor 482, while the piston rod carried by each hydraulic cylinder is pivotally attached to the main frame 414. The hydraulic cylinders are connected in parallel to a conventional hydraulic power source (not shown) so that the

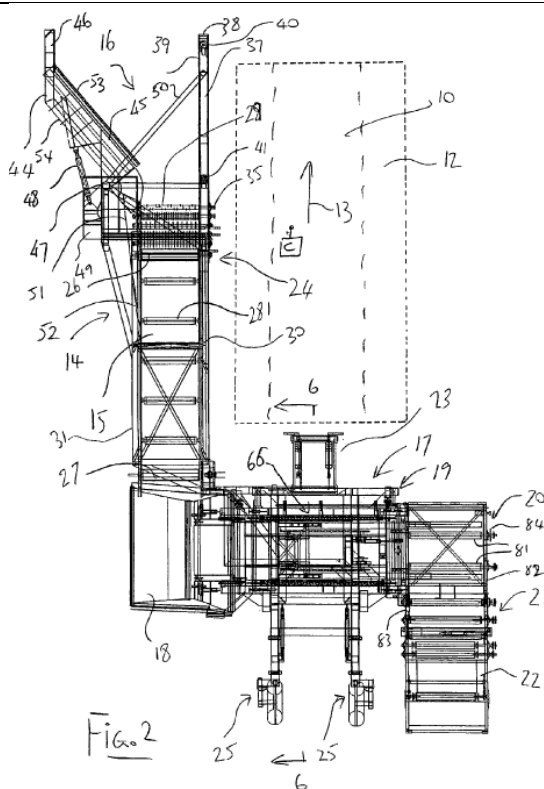
piston rods may be extended or retracted as required to position the first material lifting conveyor 482 in the first mode or in the second mode.” Swisher, 20:24-46.



Claim 2

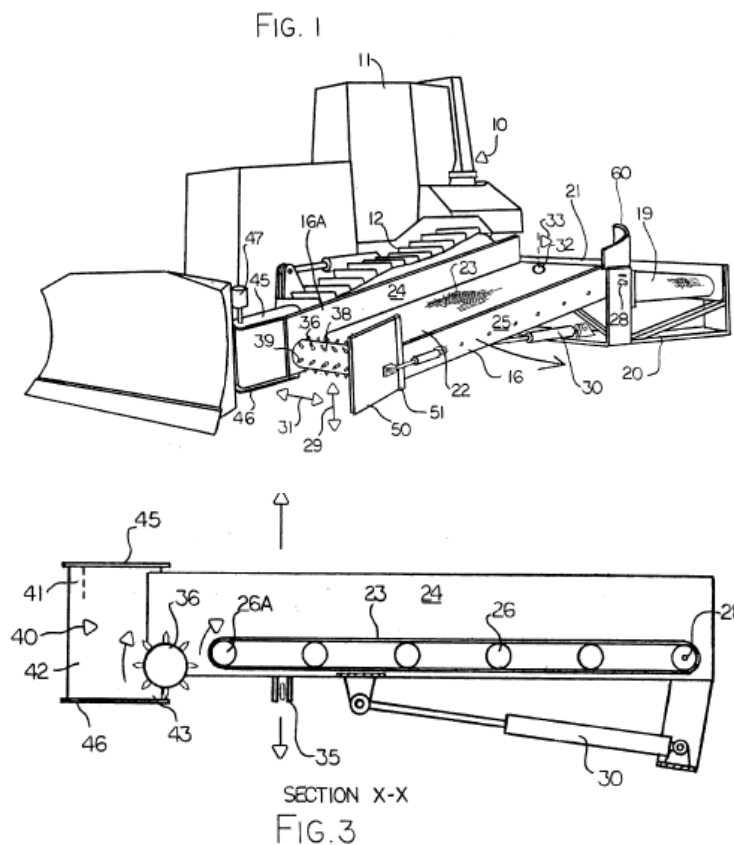
The apparatus of claim 1 wherein the mast drives the frame adjacent the receiving bin to select a spacing between the frame and the chassis.

“The side wall **30** includes mounting lugs **35** and **36** for receiving support elements of a coupling **24** which connects the side of the vehicle to the sidewall **30**. The coupling element **24** includes a link which allows the frame to pivot inwardly and outwardly about a horizontal axis parallel to the direction **13** so that the picking section can pivot outwardly and upwardly or outwardly and downwardly to accommodate changes in ground contour. In addition to the angle of the bottom skid **34** about a horizontal pivot axis transverse to the direction **13** can be changed by actuating the four point hitch connection **23** and/or by lifting the linkage **24**.” McLeod/Pisomy, p. 14, 17-25.



“In U.S. Pat. No. 5,934,861 issued Aug. 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2.241.682 published 26th Feb. 1999, a first proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisomy, p. 2, ll. 10-16. “The conveyor table **16** is mounted for pivotal movement about a horizontal pivot shaft **28** defining a pivot access adjacent the feed end **17a** for upward and downward vertical movement **29** of the forward end **27** of the conveyor table. Actuation of the vertical movement **29** is effected by a hydraulic drive cylinder **30** connected between the frame **20** and the

underside of the conveyer table.” ‘861 patent, 2:66-3:5; “means mounting the conveyer table for movement of the forward end vertically up and down for adjustment of the height of the forward end.” ‘861 patent, 4:38-40.

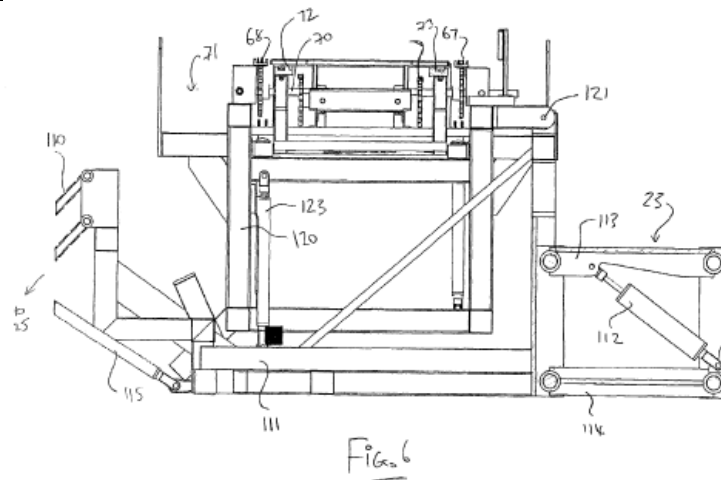


Swisher: “The elevator assembly 30 further comprises a support placement assembly 214 which permits selective movement of the material lifting conveyor 204 between a first (or raised) mode and a second (or lowered) mode. In the first mode (shown in solid lines in FIG. 2) the discharge end 32 of the material lifting conveyor 204 is elevated; and in the second mode (shown in dashed lines in FIG. 2) the discharge end

32 of the material lifting conveyor 204 is lowered. As shown in FIGS. 1 and 2, the support placement assembly 214 comprises a folding stabilizer assembly 216. The support placement assembly prevents twisting and side-to-side movement of the material lifting conveyor 204. The support placement assembly 214 includes an upper cross frame 218 and a lower cross frame 220. The upper cross frame 218 comprises a pair of parallel side members, such as side member 219. The parallel side members of the upper cross frame 218 are pivotally connected at one end thereof to the sides of the material lifting conveyor 204; and the other ends of the parallel side members are interconnected by a cross brace 224.” Swisher, 11:”12-32. “The support placement assembly 214 further comprises a pair of hydraulic cylinders, such as hydraulic cylinder 222. The hydraulic cylinders are disposed on each side of the material lifting conveyor 204 such that upon activation of the hydraulic cylinders the material lifting conveyor 204 is moved between the first mode (raised position) and the second mode (lowered position). Each hydraulic cylinder, such as hydraulic cylinder 222, is pivotally attached at its base to the main frame 36, while the piston rod carried by each hydraulic cylinder is pivotally attached to the material lifting conveyor 204. The hydraulic cylinders are connected in parallel to a conventional hydraulic power source (not shown) so that the piston rods may be extended or retracted as required to position the material lifting conveyor 204 in the first mode or in the second mode.” Swisher, 11:43-58.

“The first elevator assembly 436 further comprises a first support placement assembly 492 which permits selective pivotal movement of the first material lifting conveyor 482 between a first mode and in a second mode. When the first material lifting conveyor 482 is in the first mode, the second end 488 of the conveyor is elevated to the position depicted in FIG. 5; whereas, when the material lifting conveyor 482 is in the second mode (shown in phantom lines in FIG. 5) the second end 488 of the first material lifting conveyor 482 is retracted. The first support placement assembly 492 comprises a pair of hydraulic cylinders, such as hydraulic cylinder 494. The hydraulic cylinders are disposed on each side of the first material lifting conveyor 482. Each hydraulic cylinder, such as the hydraulic cylinder 494, is pivotally attached at its base to the first material lifting conveyor 482, while the piston rod carried by each hydraulic cylinder is pivotally attached to the main frame 414. The hydraulic cylinders are

	<p>connected in parallel to a conventional hydraulic power source (not shown) so that the piston rods may be extended or retracted as required to position the first material lifting conveyor 482 in the first mode or in the second mode.” Swisher, 20:24-46.</p> <p style="text-align: center;">FIG. 5</p>
<p>Claim 4</p> <p>The apparatus of claim 1 wherein the stacking assembly further includes a pivoting arrangement for tilting the stacking assembly relative to the chassis to provide for substantial leveling of the stacking assembly when operating on uneven ground surfaces.</p>	<p>“[T]he stacking section included in the conveyor 66 and the stacking arms on the vertical conveyor of the stacking assembly is mounted on a subframe section 120 separate from the frame section 111 and pivotally connected to the frame section 111 on a pivot pin 121. The height of the stacking section relative to the frame section 111 can be adjusted by a cylinder 123 under control of the operator standing on the frame 71. Thus the stacking section can be maintained substantially horizontal relative to a front to rear direction by pivoting action about the horizontal transverse pivot pin 121.” McLeod/Pisony, p. 24, l-p. 25, l. 6.</p>



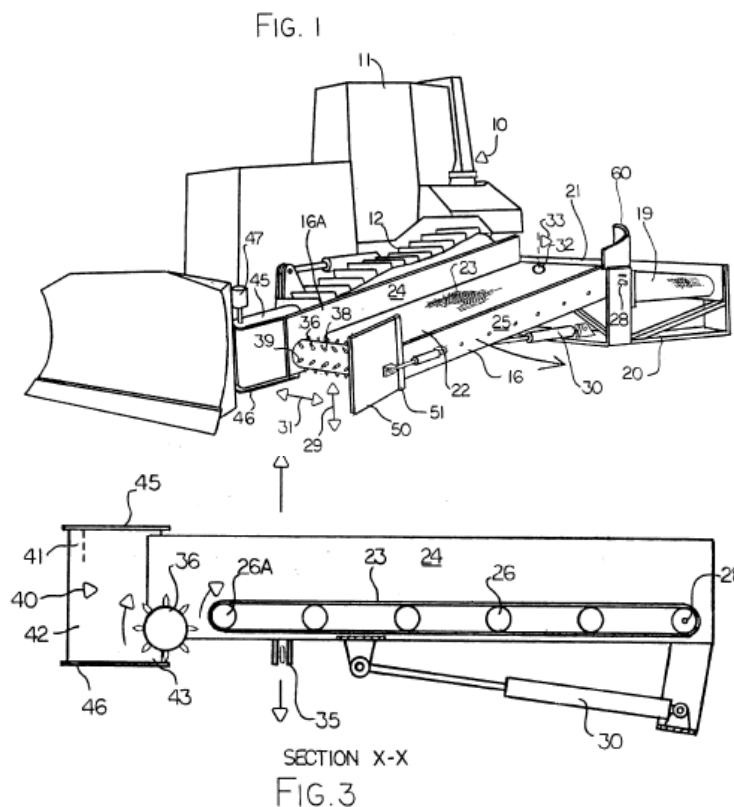
“The apparatus of claim 11 wherein the stacking assembly and the bundling assembly are mounted on a sub-frame portion of the frame which is arranged for pivotal movement relative to the frame and relative to the conveyor about a horizontal axis transverse to the direction of the movement of the vehicle to maintain the stacking assembly and bundling assembly substantially level as the vehicle moves.”
McLeod/Pisony, p. 31, ll. 11-16.

Claim 6

The apparatus of claim 1 wherein the mast includes a hydraulic cylinder drivable to telescope to various lengths.

“In U.S. Pat. No. 5,934,861 issued Aug. 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2.241.682 published 26th Feb. 1999, a first proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisony, p. 2, ll. 10-16. “The conveyor table **16** is mounted for pivotal movement about a horizontal pivot shaft **28** defining a pivot access adjacent the feed end **17a** for upward and downward vertical movement **29** of the forward end **27** of the conveyor table. Actuation of the vertical movement **29** is effected by a hydraulic drive cylinder **30** connected between the frame **20** and the

underside of the conveyer table.” ‘861 patent, 2:66-3:5; “means mounting the conveyer table for movement of the forward end vertically up and down for adjustment of the height of the forward end.” ‘861 patent, 4:38-40;



Swisher: “The elevator assembly 30 further comprises a support placement assembly 214 which permits selective movement of the material lifting conveyor 204 between a first (or raised) mode and a second (or lowered) mode. In the first mode (shown in solid lines in FIG. 2) the discharge end 32 of the material lifting conveyor 204 is elevated; and in the second mode (shown in dashed lines in FIG. 2) the discharge end 32 of the material lifting conveyor 204 is lowered. As shown in FIGS. 1 and 2, the

support placement assembly 214 comprises a folding stabilizer assembly 216. The support placement assembly prevents twisting and side-to-side movement of the material lifting conveyor 204. The support placement assembly 214 includes an upper cross frame 218 and a lower cross frame 220. The upper cross frame 218 comprises a pair of parallel side members, such as side member 219. The parallel side members of the upper cross frame 218 are pivotally connected at one end thereof to the sides of the material lifting conveyor 204; and the other ends of the parallel side members are interconnected by a cross brace 224.” Swisher, 11:”12-32. “The support placement assembly 214 further comprises a pair of hydraulic cylinders, such as hydraulic cylinder 222. The hydraulic cylinders are disposed on each side of the material lifting conveyor 204 such that upon activation of the hydraulic cylinders the material lifting conveyor 204 is moved between the first mode (raised position) and the second mode (lowered position). Each hydraulic cylinder, such as hydraulic cylinder 222, is pivotally attached at its base to the main frame 36, while the piston rod carried by each hydraulic cylinder is pivotally attached to the material lifting conveyor 204. The hydraulic cylinders are connected in parallel to a conventional hydraulic power source (not shown) so that the piston rods may be extended or retracted as required to position the material lifting conveyor 204 in the first mode or in the second mode.” Swisher, 11:43-58.

“The first elevator assembly 436 further comprises a first support placement assembly 492 which permits selective pivotal movement of the first material lifting conveyor 482 between a first mode and in a second mode. When the first material lifting conveyor 482 is in the first mode, the second end 488 of the conveyor is elevated to the position depicted in FIG. 5; whereas, when the material lifting conveyor 482 is in the second mode (shown in phantom lines in FIG. 5) the second end 488 of the first material lifting conveyor 482 is retracted. The first support placement assembly 492 comprises a pair of hydraulic cylinders, such as hydraulic cylinder 494. The hydraulic cylinders are disposed on each side of the first material lifting conveyor 482. Each hydraulic cylinder, such as the hydraulic cylinder 494, is pivotally attached at its base to the first material lifting conveyor 482, while the piston rod carried by each hydraulic cylinder is pivotally attached to the main frame 414. The hydraulic cylinders are connected in parallel to a conventional hydraulic power source (not shown) so that the

piston rods may be extended or retracted as required to position the first material lifting conveyor 482 in the first mode or in the second mode.” Swisher, 20:24-46.

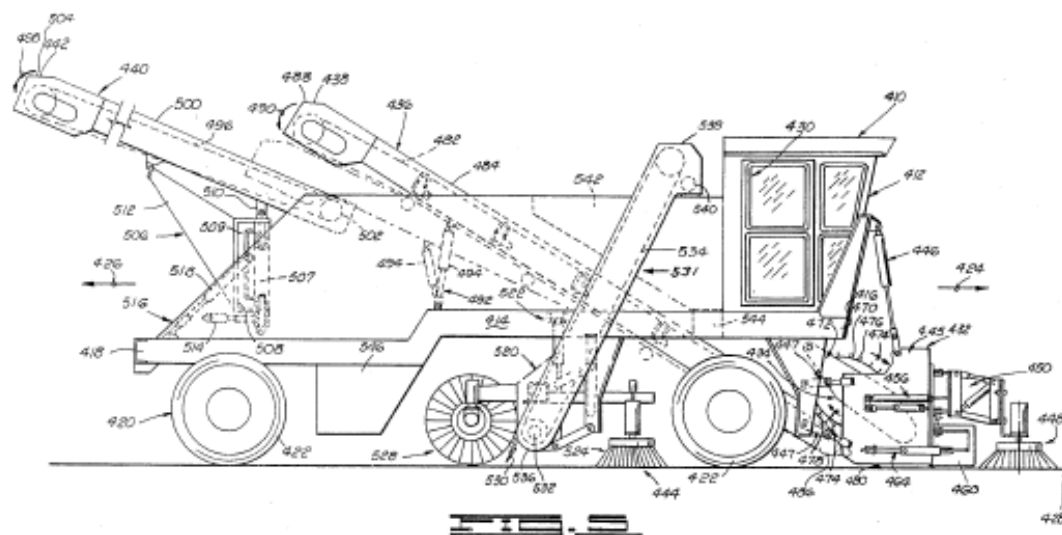
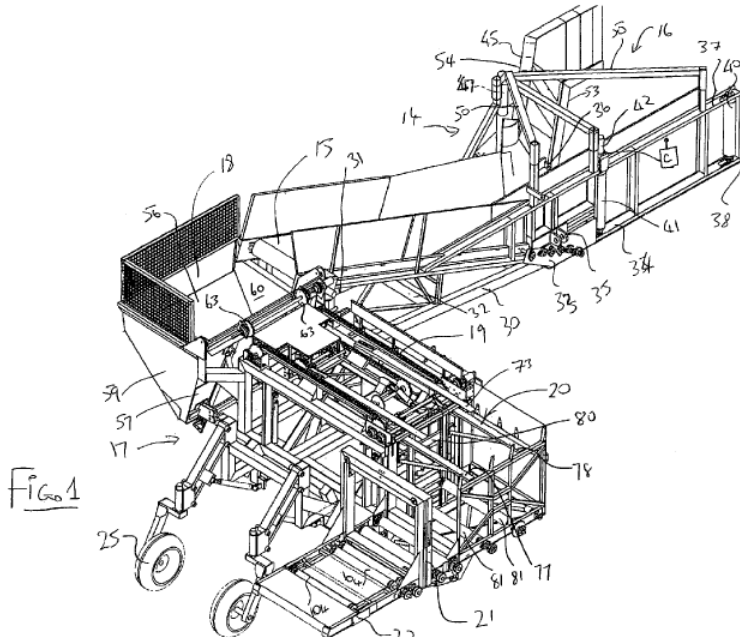
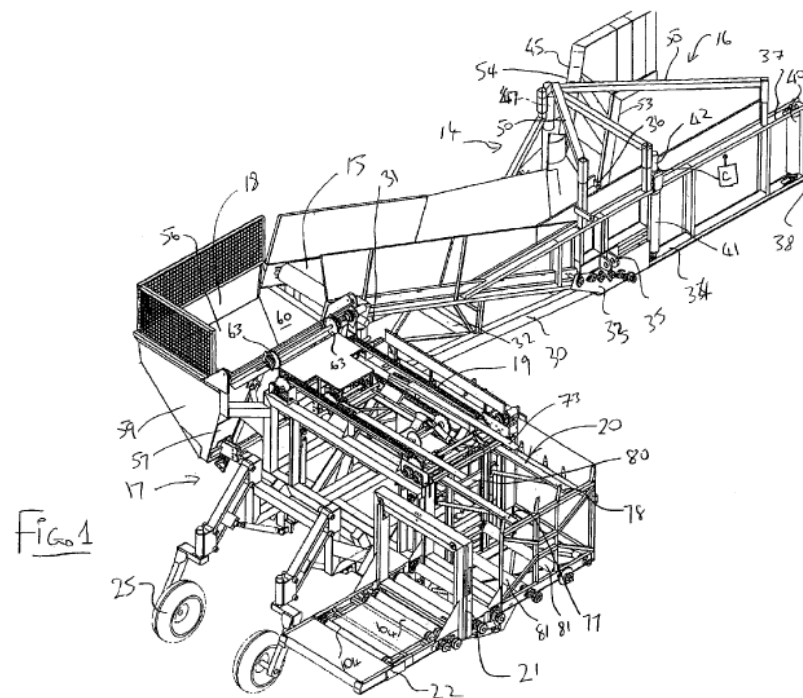


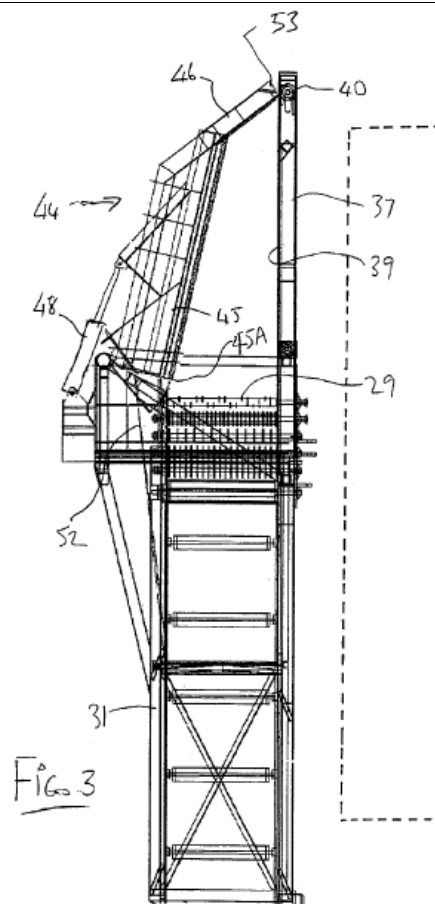
EXHIBIT K

Invalidity Contentions Claim Chart for U.S. Patent No. 7,591,629
Claims 1, 2, 4 and 6 in view of McLeod/Pisony and Liu under 35 U.S.C. § 103

Claim 1	McLeod/Pisony and Liu
An apparatus for picking up, stacking and bundling lumber, comprising:	The preamble is not a limitation. However, to the extent it could be construed to be a limitation, the '202 patent discloses an apparatus for picking up, stacking and bundling lumber": "[a]n apparatus for picking, conveying, stacking and bundling lumber pieces from the grounds ..." McLeod/Pisony, Abstract (57)
(a) a chassis,	"The elements provided by the picking and conveyer assembly 14 , the stacking assembly 17 and the bundling assembly 21 are all mounted on a frame for common movement with the vehicle 10 in the working direction 13 . The frame carrying these elements is attached to the vehicle by a four point hitch 23 at the rear of the vehicle and by coupling assembly generally indicated at 24 at the side of the vehicle and inwardly of the picking and conveyer assembly 14 . McLeod/Pisony, p. 11, l. 23-p. 12, l. 3.

	
(b) a grapple carried with the chassis,	<p>“Such an arrangement can also be used with a picking assembly in the form of a mechanically operated grapple which lifts the pieces from a large pile of the pieces for formation into stacks which are bundled and discharged. Again therefore this device in combination with a grapple type picking assembly is portable on a suitable trailer or frame carried by a vehicle so that it can be moved to a pile or collection of the piecing for stacking.” McLeod/Pisomy, p. 13, ll. 2-7.</p>
(c) a conveyor assembly supported on the chassis,	<p>“The apparatus further includes a picking and conveyor assembly 14 having a main conveyor 15 attached to and arranged rearwardly of a picker 16.” ‘202 patent, 4:45-47. The elements provided by the picking and conveyor assembly 14, the stacking assembly 17 and the bundling assembly 21 are all mounted on a frame for common movement with the vehicle 10 in the working direction 13. McLeod/Pisomy, p. 11, ll. 18-25.</p>





(d)) a stacking assembly operatively connected adjacent the conveyor assembly, the stacking assembly including an unscrambling hopper, a row conveyor, a stacking bin and a bundling assembly, and,

“At the rear of the conveyor **15** is provided a stacking assembly **14** generally indicated at **17** including an unscrambling hopper **18**, a row conveyor **19** and a stacking assembly **20**. The apparatus further including a bundling assembly **21** including a discharge ramp **22**.” ‘202 patent, 4:47-52. The elements provided by the picking and conveyor assembly **14**, the stacking assembly **17** and the bundling assembly **21** are all mounted on a frame for common movement with the vehicle **10** in the working direction **13**. McLeod/Pisony, p. 11, ll. 19-25.

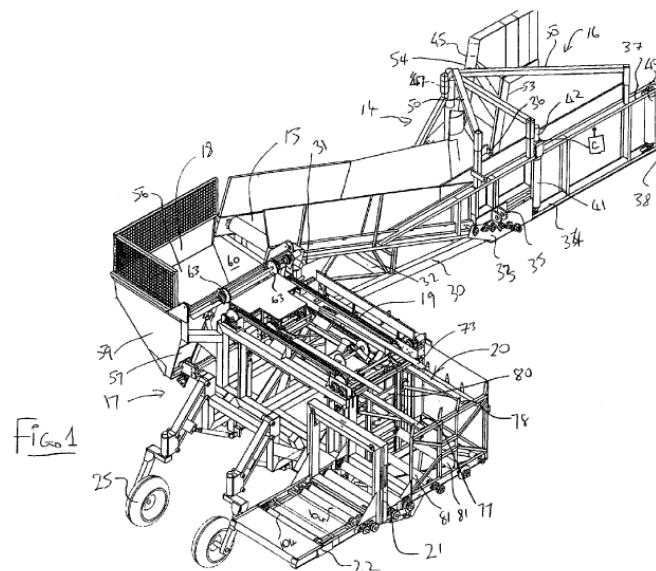
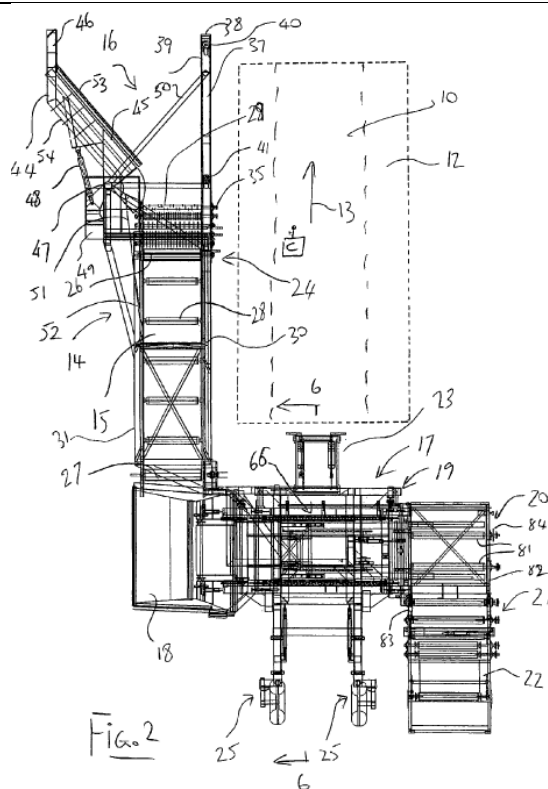
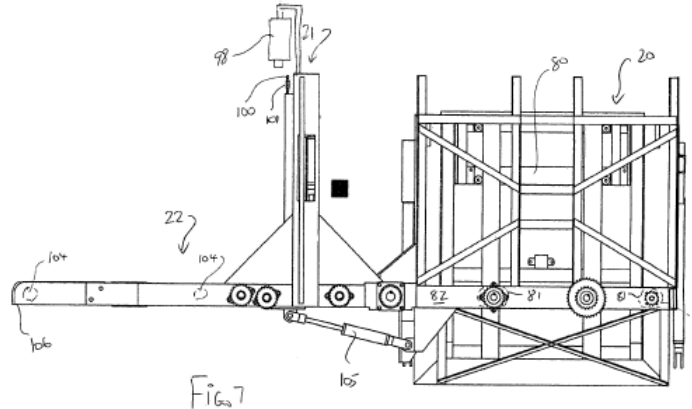
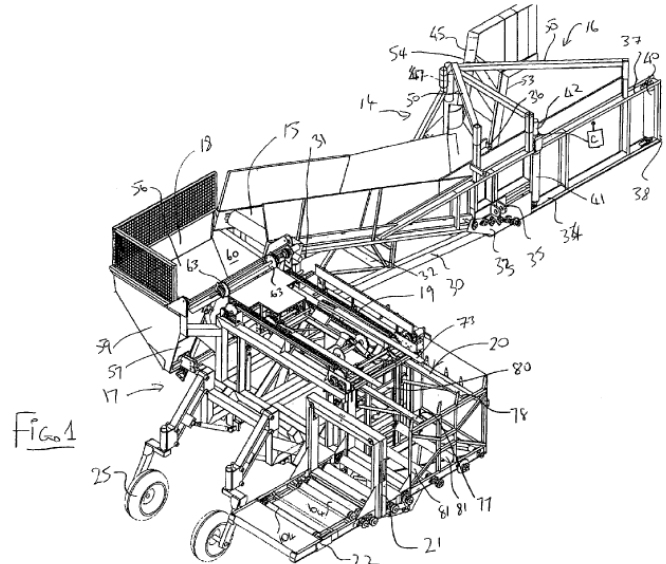


FIG. 1



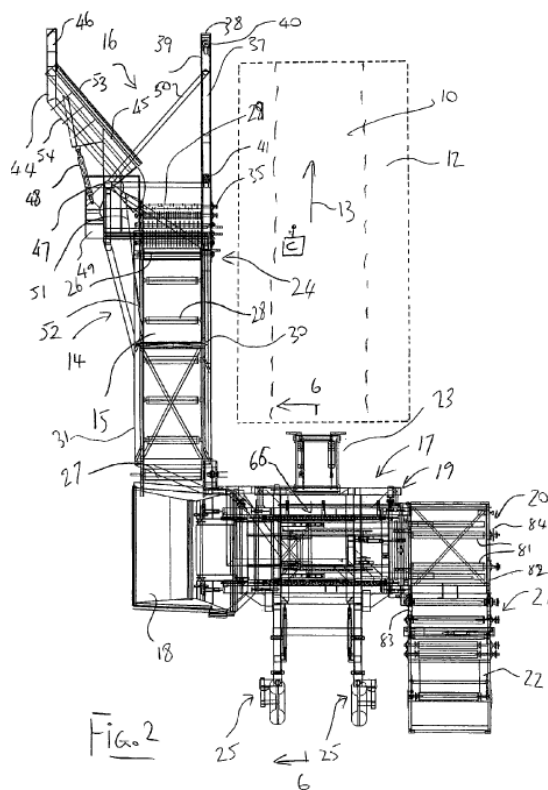
(e) a discharge platform operatively connected adjacent the bundling assembly,

The apparatus further including a bundling assembly **21** including a discharge ramp **22**.” McLeod/Pisomy, p. 11, ll. 22-23.

	 <p>Fig. 7</p>
<p>(f) wherein the conveyor assembly includes a frame,</p>	<p>“The conveyor is mounted on a frame section of the main frame having a first side 30 and a second side 31. McLeod/Pisony, p. 14, ll. 10-12.</p>  <p>Fig. 4</p>
<p>a pivotal connection for the frame to permit angular adjustment of the frame</p>	<p>“The side wall 30 includes mounting lugs 35 and 36 for receiving support elements of a coupling 24 which connects the side of the vehicle to the sidewall 30.</p>

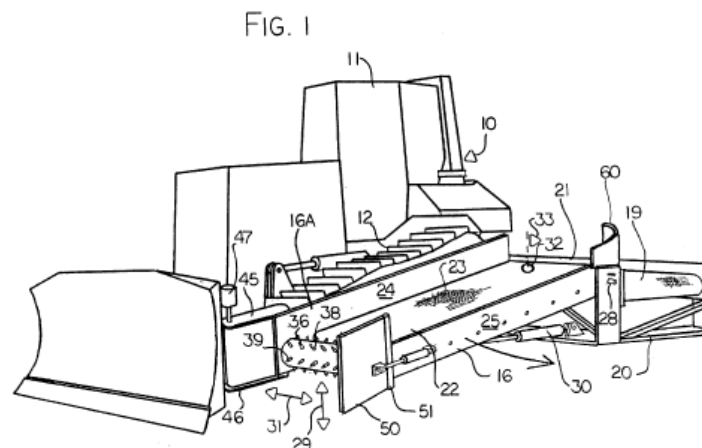
relative to the chassis,

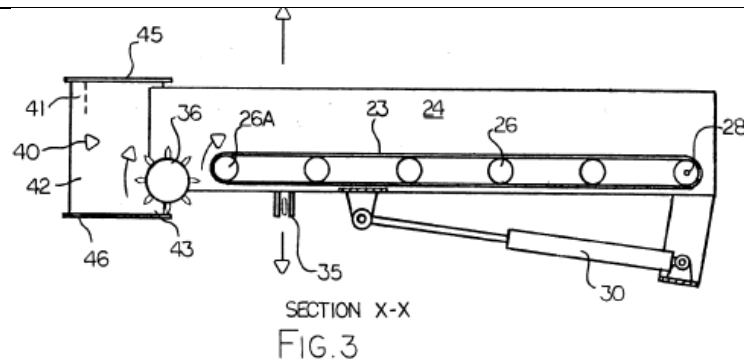
The coupling element **24** includes a link which allows the frame to pivot inwardly and outwardly about a horizontal axis parallel to the direction **13** so that the picking section can pivot outwardly and upwardly or outwardly and downwardly to accommodate changes in ground contour. In addition to the angle of the bottom skid **34** about a horizontal pivot axis transverse to the direction **13** can be changed by actuating the four point hitch connection **23** and/or by lifting the linkage **24**.”
McLeod/Pisomy, p. 14, ll. 19-25.



“In US patent 5934861 issued August 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2241682 published 26th February 1999, a first proposal was made for a machine which picks up the pieces and conveys

them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisony, p. 2, ll. 10-16. “The conveyer table **16** is mounted for pivotal movement about a horizontal pivot shaft **28** defining a pivot axis adjacent the feed end **17a** for upward and downward vertical movement **29** of the forward end **27** of the conveyer table. Actuation of the vertical movement **29** is effected by a hydraulic drive cylinder **30** connected between the frame **20** and the underside of the conveyer table.” ‘861 patent, 2:66-3:5; “means mounting the conveyor table for movement of the forward end vertically up and down for adjustment of the height of the forward end.” ‘861 patent, 4:38-40.





Liu: “A central frame member 428 supports the conveyor axles 422 and 423. The frame member 428 is pivotably mounted at pin 430 to a vertical member 429 which is rigidly affixed to the trailer 409. Hydraulic ram 431 extends between the central frame member 428 and element 432 the height of the frame member 428 may be decreased by retracting the ram 431 in the direction of 433. The inclination of the belt 424 may be necessary to permit improved transport of certain types of debris, or to promote even filling of the collection hopper 434. In the collection mode, the hopper 434 is in the lower position depicted in FIG. 35. The front side 435 of the hopper 434 is open so as to permit the passage of collected debris. When the hopper 434 is to be emptied, it is raised to the position 434' by means of lever 436. A door 437 is formed into the bottom of the hopper 434 which is may be unfastened and permitted to open along hinge line 438. The collected debris can then exit the hopper by gravity.” Liu, 21:39-57.

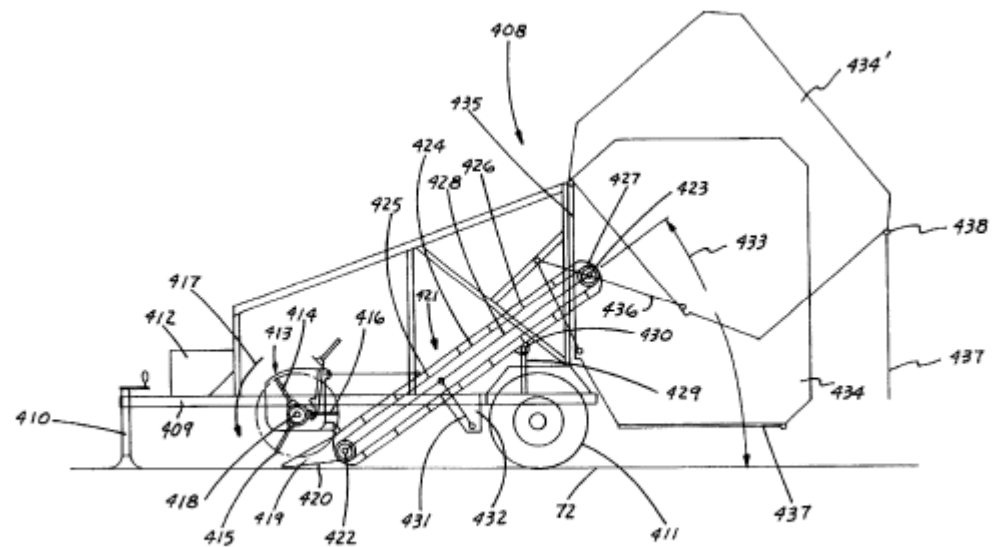
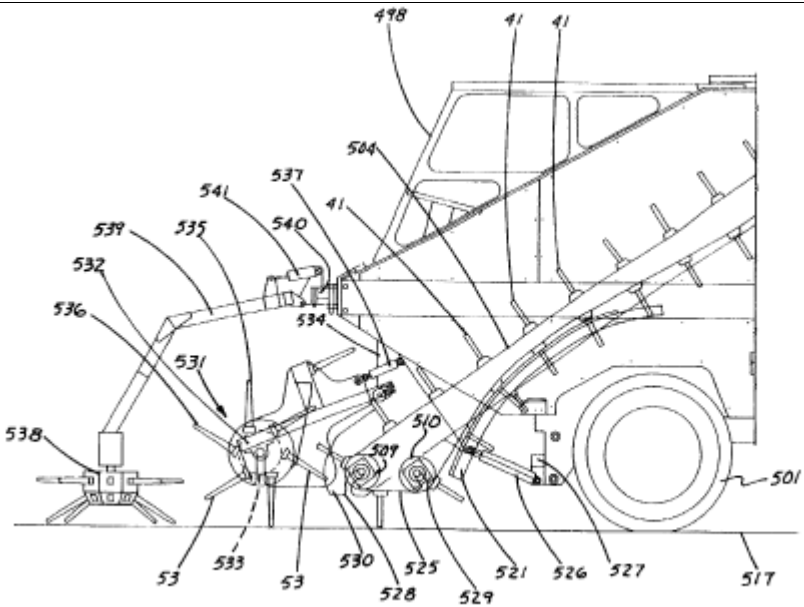
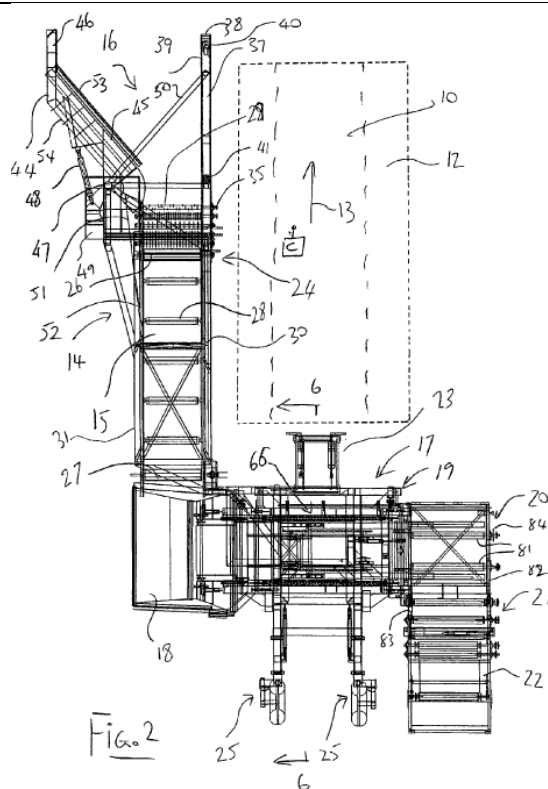


FIG. 35

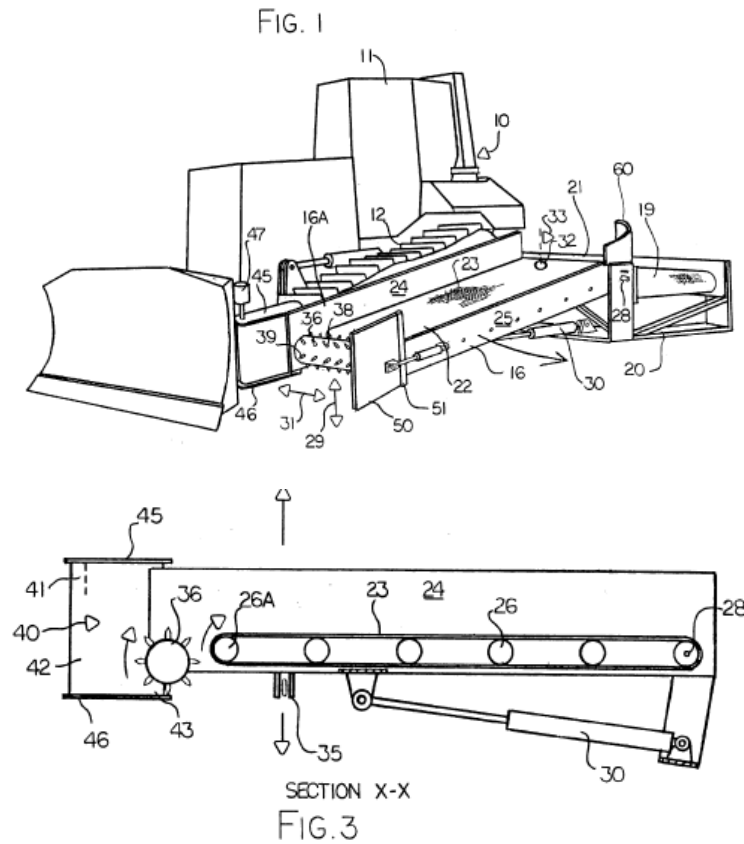
“Referring now to FIG. 54, additional functional details of this arrangement can be appreciated. Several structural features are provided to permit adjustment of the tension of belt 504 and to vary the clearance between the lowest portion 525 of belt 504 and the road surface 517. First, an hydraulic ram 526 extends between the conveyor frame and the vehicle frame bracket 527. Liu, 24:39-46.

	
<p>an extendible mast connected between the frame and the chassis to drive the frame about the pivotal connection</p>	<p>“The side wall 30 includes mounting lugs 35 and 36 for receiving support elements of a coupling 24 which connects the side of the vehicle to the sidewall 30. The coupling element 24 includes a link which allows the frame to pivot inwardly and outwardly about a horizontal axis parallel to the direction 13 so that the picking section can pivot outwardly and upwardly or outwardly and downwardly to accommodate changes in ground contour. In addition to the angle of the bottom skid 34 about a horizontal pivot axis transverse to the direction 13 can be changed by actuating the four point hitch connection 23 and/or by lifting the linkage 24.” McLeod/Pisony, p. 14, ll. 17-25.</p>



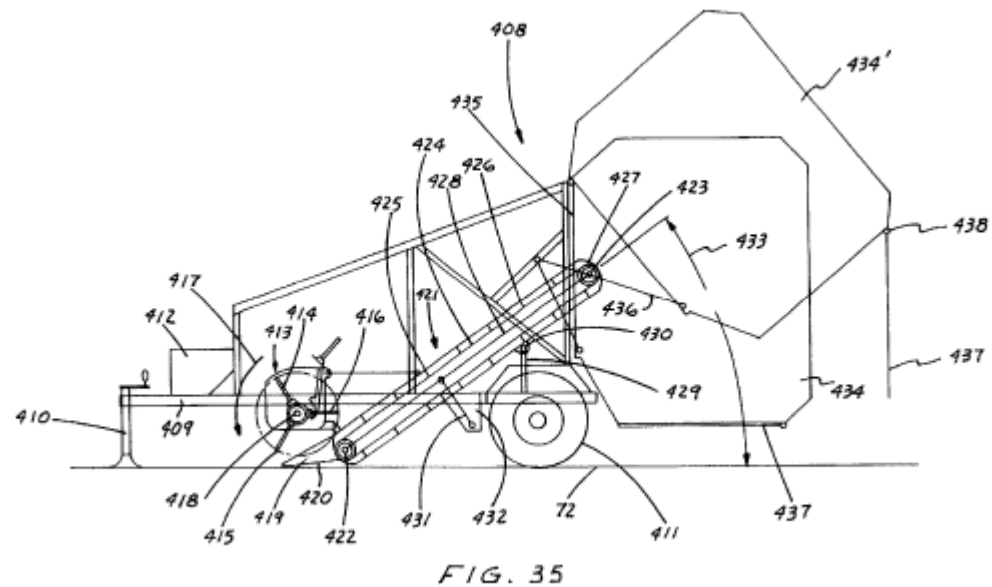
“In U.S. Pat. No. 5,934,861 issued Aug. 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2.241.682 published 26th Feb. 1999, a first proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisomy, p. 2, ll. 10-16. “The conveyor table **16** is mounted for pivotal movement about a horizontal pivot shaft **28** defining a pivot access adjacent the feed end **17a** for upward and downward vertical movement **29** of the forward end **27** of the conveyor table. Actuation of the vertical movement **29** is effected by a hydraulic drive cylinder **30** connected

between the frame **20** and the underside of the conveyer table.” ‘861 patent, 2:66-3:5; “means mounting the conveyer table for movement of the forward end vertically up and down for adjustment of the height of the forward end.” ‘861 patent, 4:38-40.

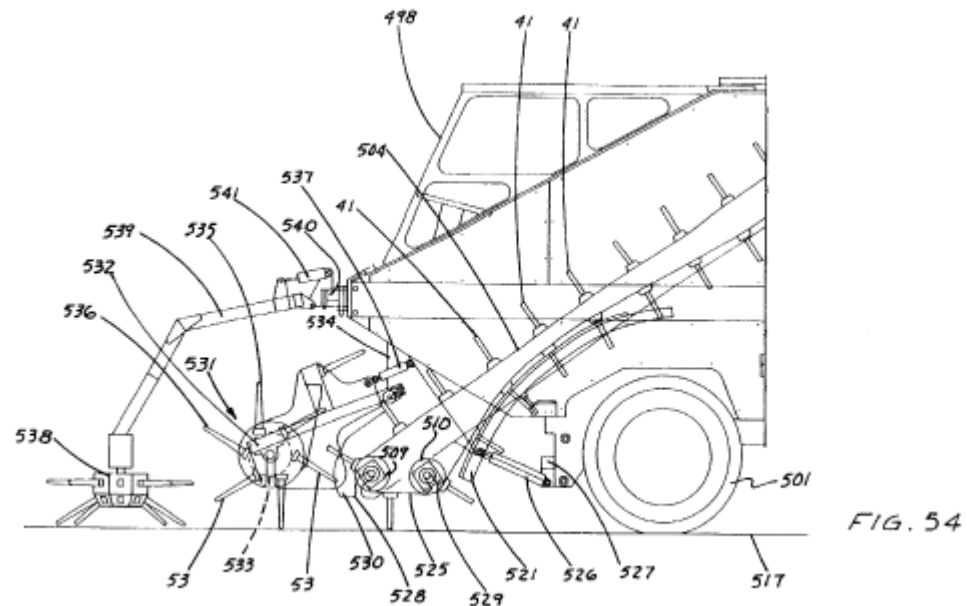


Liu: “A central frame member 428 supports the conveyor axles 422 and 423. The frame member 428 is pivotally mounted at pin 430 to a vertical member 429 which

is rigidly affixed to the trailer 409. Hydraulic ram 431 extends between the central frame member 428 and element 432 the height of the frame member 428 may be decreased by retracting the ram 431 in the direction of 433. The inclination of the belt 424 may be necessary to permit improved transport of certain types of debris, or to promote even filling of the collection hopper 434. In the collection mode, the hopper 434 is in the lower position depicted in FIG. 35. The front side 435 of the hopper 434 is open so as to permit the passage of collected debris. When the hopper 434 is to be emptied, it is raised to the position 434' by means of lever 436. A door 437 is formed into the bottom of the hopper 434 which is may be unfastened and permitted to open along hinge line 438. The collected debris can then exit the hopper by gravity." Liu, 21:39-57.



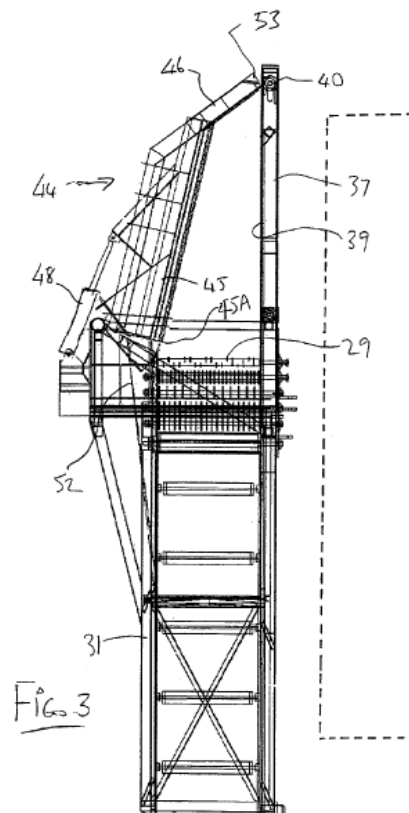
“Referring now to FIG. 54, additional functional details of this arrangement can be appreciated. Several structural features are provided to permit adjustment of the tension of belt 504 and to vary the clearance between the lowest portion 525 of belt 504 and the road surface 517. First, an hydraulic ram 526 extends between the conveyor frame and the vehicle frame bracket 527. Liu, 24:39-46.



and a receiving bin and a conveyor carried on the frame,

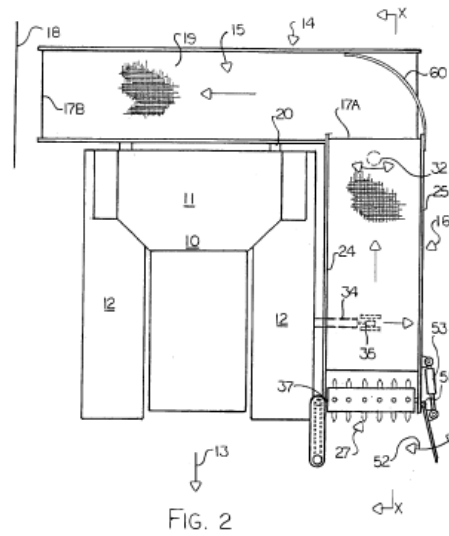
“The conveyor **15** includes a conveyor belt having a forward end **26** and a rear end **27** and is mounted on a plurality of support rollers **28** so that an upper run of the belt carries the pieces rearwardly and upwardly from the forward end **26** into the unscrambling hopper **18** at the rear end **27**.” McLeod/Pisony, p. 13, ll. 8-11. “In front of the conveyor belt is provided a plurality of picking rollers **28** arranged in a row in front of the front roller of the conveyor. ... The front picking rollers therefore act to lift the pieces off the ground or in some cases out of embedded

position within the ground by the spikes of the disc engaging in the pieces and lifting them upwardly onto the top of the rollers for movement rearwardly onto the conveyor.” McLeod/Pisony, p. 13, l. 12-p. 14, l. 9.



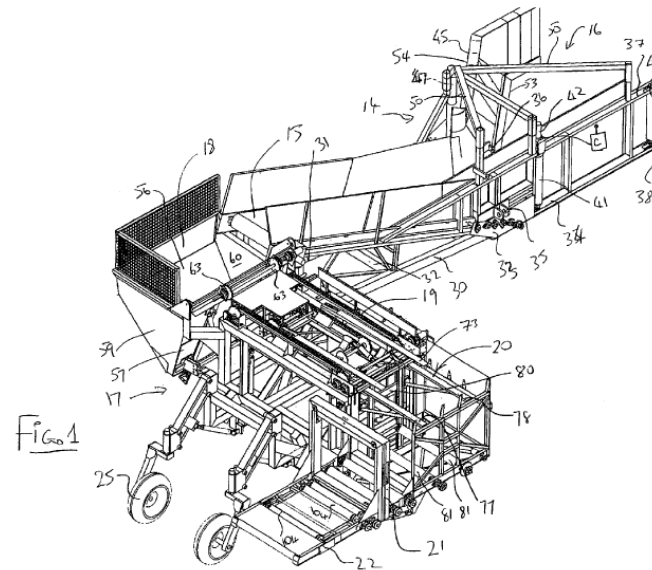
“In U.S. Pat. No. 5,934,861 issued Aug. 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2.241.682 published 26th Feb. 1999, a first proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein and which form the basis of the invention, yet further improvements have been made herein to provide a machine

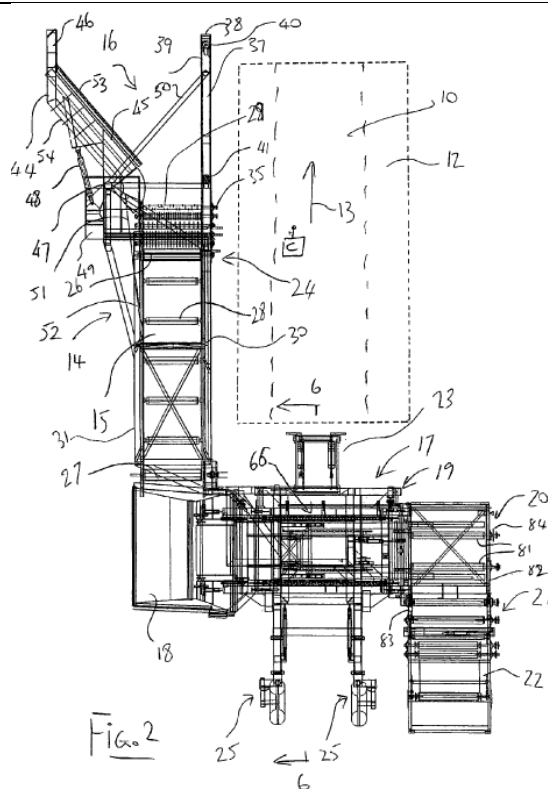
with improved operation and ergonomics.” McLeod/Pisony, p. 2, ll. 10-16. “The vehicle carries a picking and conveying system generally indicated at **14** including a main conveyor **15** and a conveyor table **16** feeding the main conveyor **15**. The main conveyor is mounted behind cab **11** of the vehicle from the feed end **16a** of the conveyor to a discharge end **17** of conveyor ...” ‘861 patent, 2:48-53. “The conveyor table includes a conveyor section **22** having a side belt **23** ...” ‘861 patent, 2:58-60.



the conveyor positioned between the receiving bin and the stacking assembly and being operable to move lumber from the receiving bin to the stacking assembly

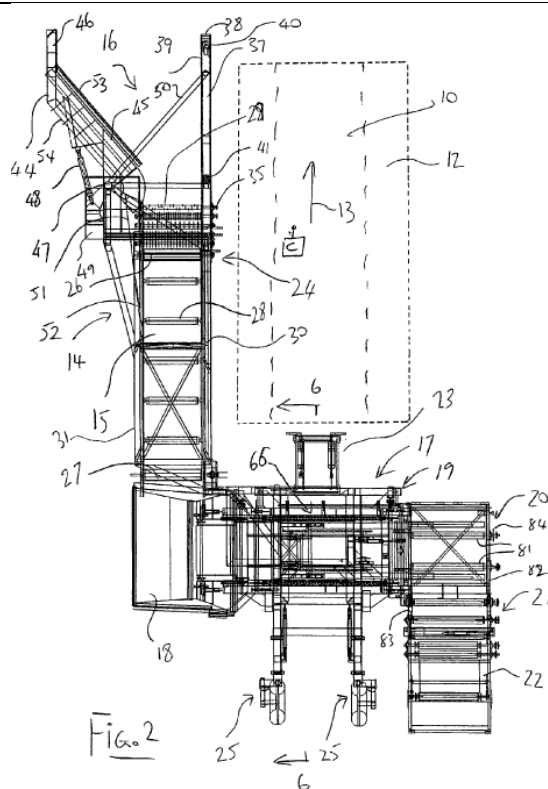
“The conveyor **15** includes a conveyor belt having a forward end **26** and a rear end **27** and is mounted on a plurality of support rollers **28** so that an upper run of the belt carries the pieces rearwardly and upwardly from the forward end **26** into the unscrambling hopper **18** at the rear end **27**.” McLeod/Pisony, p. 13, ll. 8-11





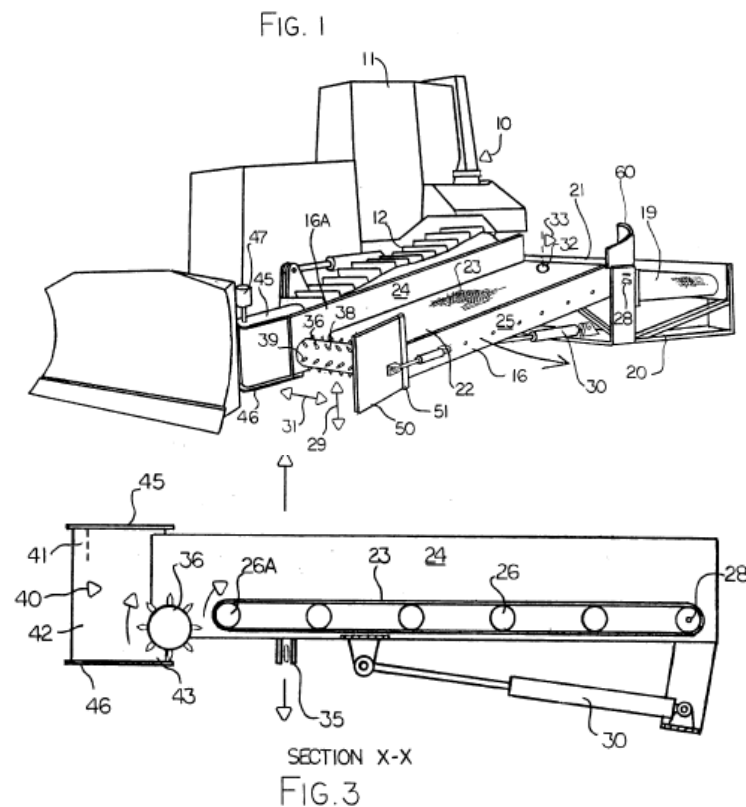
and the mast being operable to drive adjustment of the angle of the frame relative to the chassis to select the approach angle for the conveyer relative to the stacking assembly.

“The side wall **30** includes mounting lugs **35** and **36** for receiving support elements of a coupling **24** which connects the side of the vehicle to the sidewall **30**. The coupling element **24** includes a link which allows the frame to pivot inwardly and outwardly about a horizontal axis parallel to the direction **13** so that the picking section can pivot outwardly and upwardly or outwardly and downwardly to accommodate changes in ground contour. In addition to the angle of the bottom skid **34** about a horizontal pivot axis transverse to the direction **13** can be changed by actuating the four point hitch connection **23** and/or by lifting the linkage **24**.”
 ‘McLeod/Pisomy, p. 14ll. 17-25



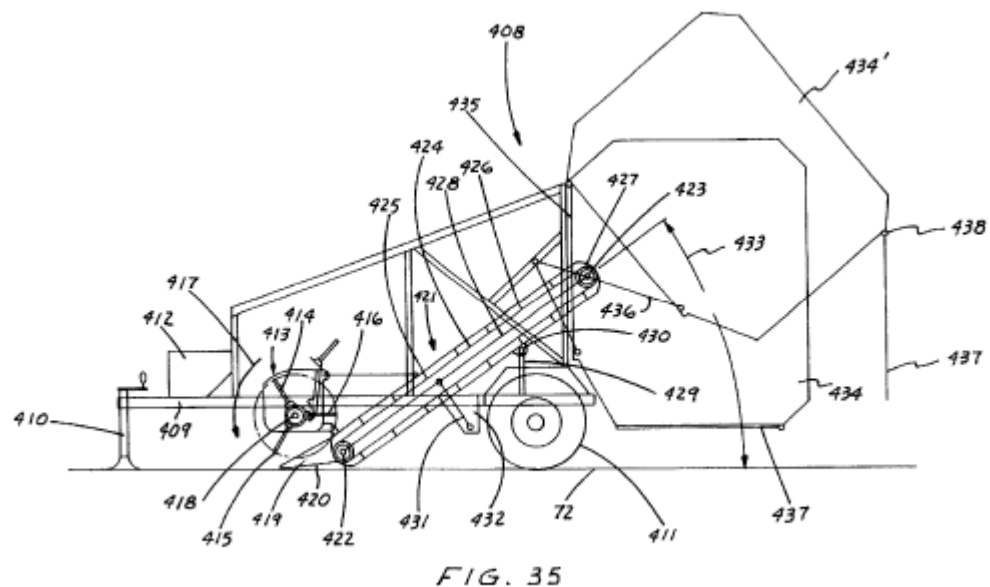
“In U.S. Pat. No. 5,934,861 issued Aug. 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2.241.682 published 26th Feb. 1999, a first proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisomy, p. 2, ll. 10-16. “The conveyor table **16** is mounted for pivotal movement about a horizontal pivot shaft **28** defining a pivot access adjacent the feed end **17a** for upward and downward vertical movement **29** of the forward end **27** of the conveyor table. Actuation of the vertical movement **29** is effected by a hydraulic drive cylinder **30** connected

between the frame **20** and the underside of the conveyer table.” ‘861 patent, 2:66-3:5; “means mounting the conveyer table for movement of the forward end vertically up and down for adjustment of the height of the forward end.” ‘861 patent, 4:38-40.



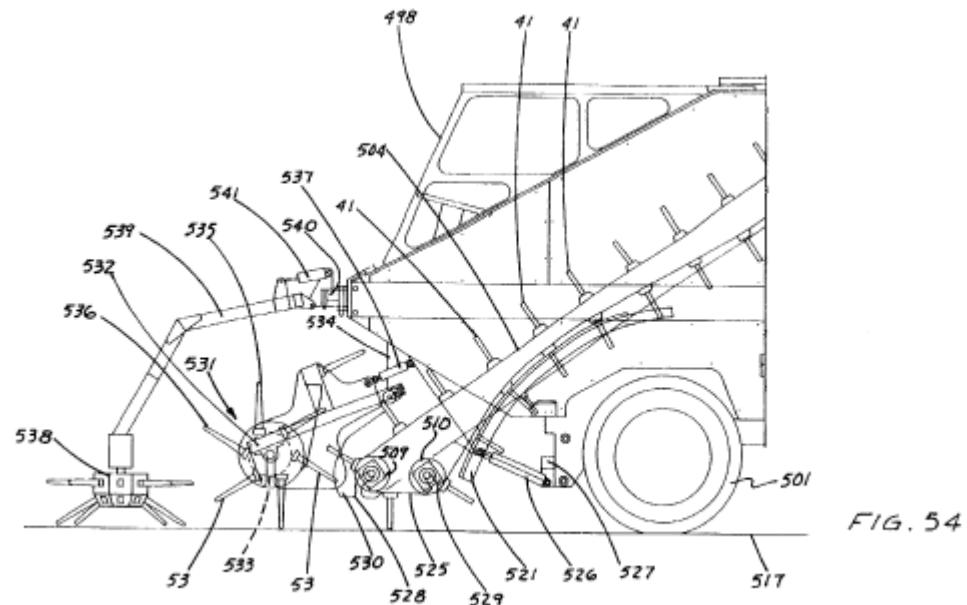
Liu: “A central frame member 428 supports the conveyor axles 422 and 423. The frame member 428 is pivotably mounted at pin 430 to a vertical member 429 which is rigidly affixed to the trailer 409. Hydraulic ram 431 extends between the central

frame member 428 and element 432 the height of the frame member 428 may be decreased by retracting the ram 431 in the direction of 433. The inclination of the belt 424 may be necessary to permit improved transport of certain types of debris, or to promote even filling of the collection hopper 434. In the collection mode, the hopper 434 is in the lower position depicted in FIG. 35. The front side 435 of the hopper 434 is open so as to permit the passage of collected debris. When the hopper 434 is to be emptied, it is raised to the position 434' by means of lever 436. A door 437 is formed into the bottom of the hopper 434 which is may be unfastened and permitted to open along hinge line 438. The collected debris can then exit the hopper by gravity.” Liu, 21:39-57.



“Referring now to FIG. 54, additional functional details of this arrangement can be

appreciated. Several structural features are provided to permit adjustment of the tension of belt 504 and to vary the clearance between the lowest portion 525 of belt 504 and the road surface 517. First, an hydraulic ram 526 extends between the conveyor frame and the vehicle frame bracket 527. Liu, 24:39-46.

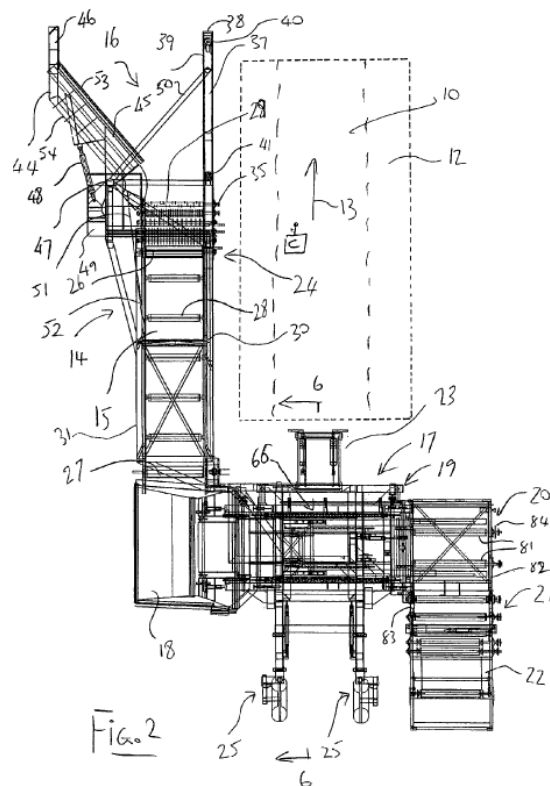


Claim 2

The apparatus of claim 1 wherein the mast drives the frame adjacent the receiving bin to select a spacing between the frame and the chassis.

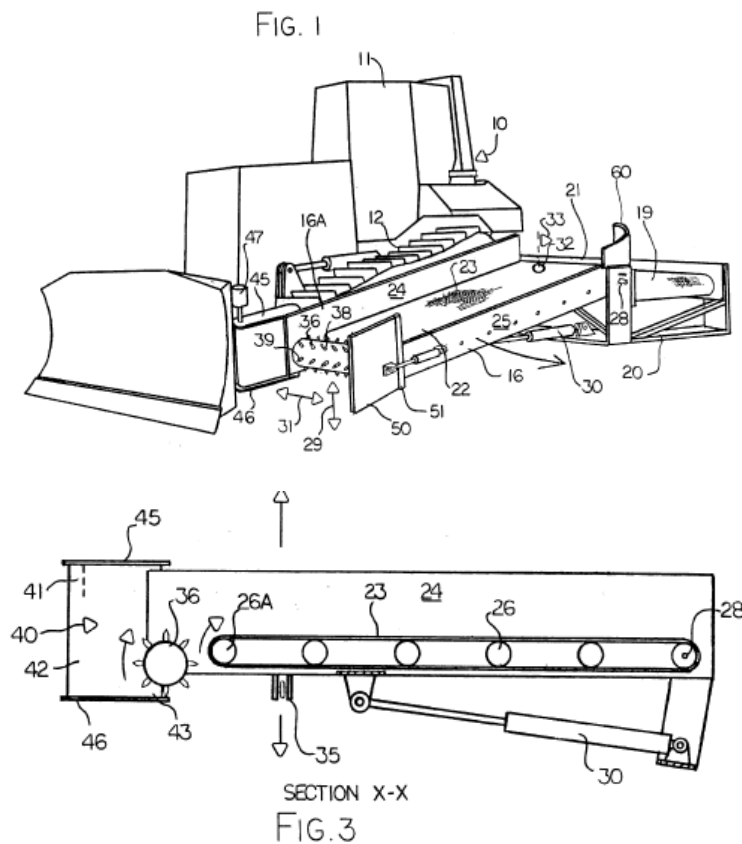
“The side wall 30 includes mounting lugs 35 and 36 for receiving support elements of a coupling 24 which connects the side of the vehicle to the sidewall 30. The coupling element 24 includes a link which allows the frame to pivot inwardly and outwardly about a horizontal axis parallel to the direction 13 so that the picking section can pivot outwardly and upwardly or outwardly and downwardly to accommodate changes in ground contour. In addition to the angle of the bottom skid 34 about a horizontal pivot axis transverse to the direction 13 can be changed by actuating the four point hitch connection 23 and/or by lifting the linkage 24.”

McLeod/Pisomy, p. 14, 17-25.



“In U.S. Pat. No. 5,934,861 issued Aug. 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2.241.682 published 26th Feb. 1999, a first proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisomy, p. 2, ll. 10-16. “The conveyor table **16** is mounted for pivotal movement about a horizontal pivot shaft **28** defining a pivot access adjacent the feed end **17a** for upward and downward

vertical movement **29** of the forward end **27** of the conveyer table. Actuation of the vertical movement **29** is effected by a hydraulic drive cylinder **30** connected between the frame **20** and the underside of the conveyer table.” ‘861 patent, 2:66-3:5; “means mounting the conveyer table for movement of the forward end vertically up and down for adjustment of the height of the forward end.” ‘861 patent, 4:38-40.



	<p>Liu: “A central frame member 428 supports the conveyor axles 422 and 423. The frame member 428 is pivotably mounted at pin 430 to a vertical member 429 which is rigidly affixed to the trailer 409. Hydraulic ram 431 extends between the central frame member 428 and element 432 the height of the frame member 428 may be decreased by retracting the ram 431 in the direction of 433. The inclination of the belt 424 may be necessary to permit improved transport of certain types of debris, or to promote even filling of the collection hopper 434. In the collection mode, the hopper 434 is in the lower position depicted in FIG. 35. The front side 435 of the hopper 434 is open so as to permit the passage of collected debris. When the hopper 434 is to be emptied, it is raised to the position 434' by means of lever 436. A door 437 is formed into the bottom of the hopper 434 which is may be unfastened and permitted to open along hinge line 438. The collected debris can then exit the hopper by gravity.” Liu, 21:39-57.</p>
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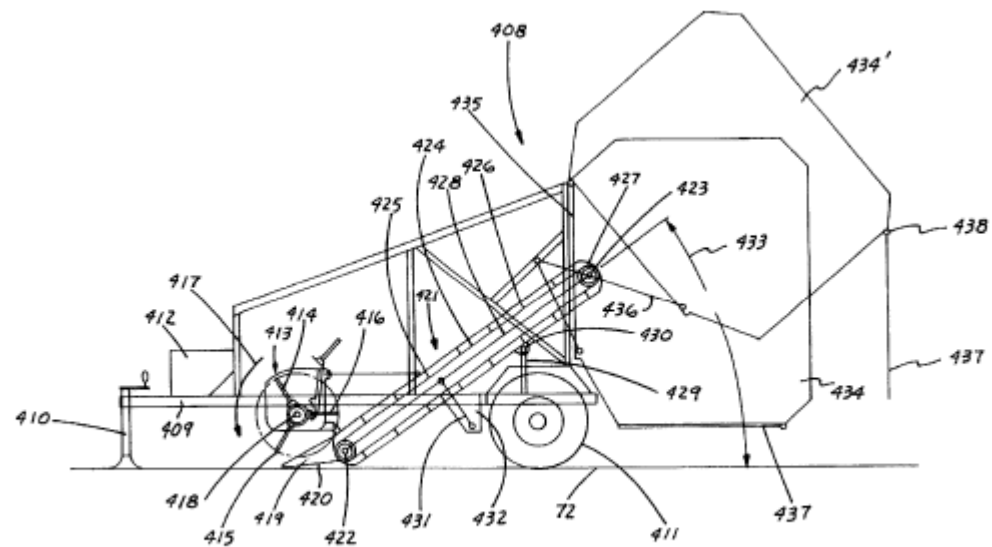
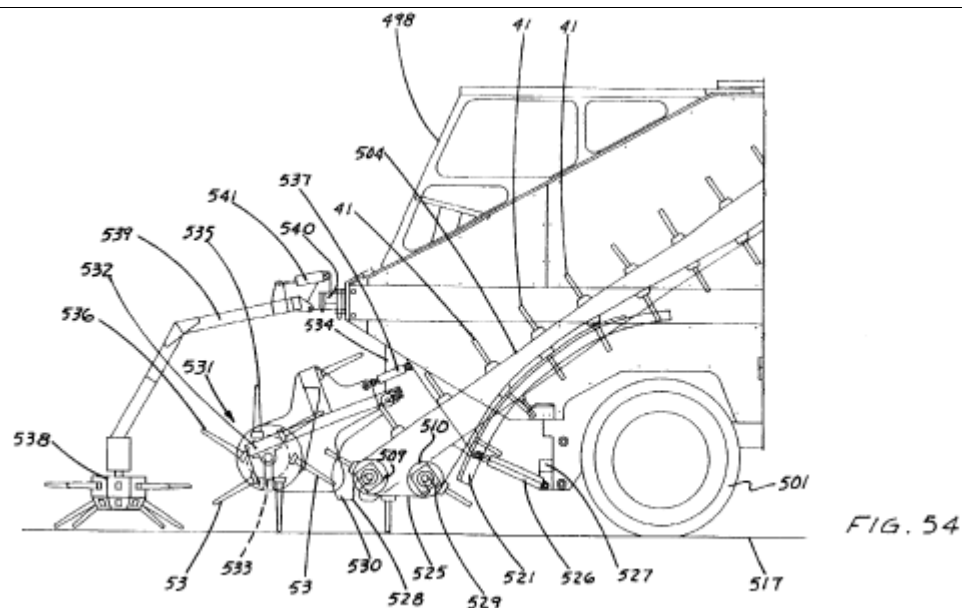


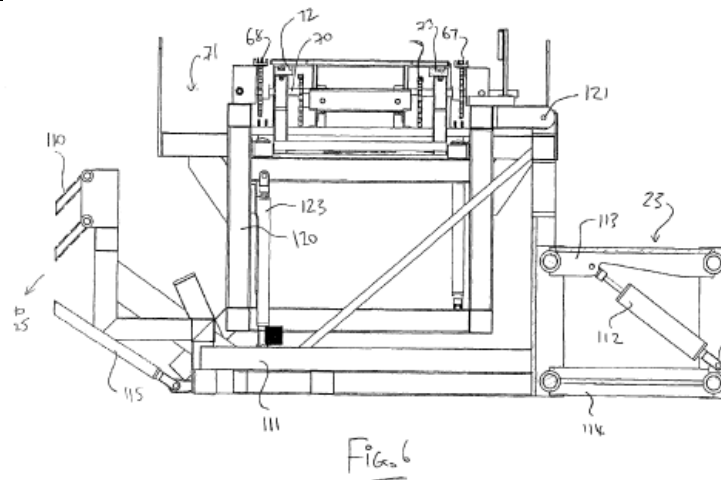
FIG. 35

“Referring now to FIG. 54, additional functional details of this arrangement can be appreciated. Several structural features are provided to permit adjustment of the tension of belt 504 and to vary the clearance between the lowest portion 525 of belt 504 and the road surface 517. First, an hydraulic ram 526 extends between the conveyor frame and the vehicle frame bracket 527. Liu, 24:39-46.

**Claim 4**

The apparatus of claim 1 wherein the stacking assembly further includes a pivoting arrangement for tilting the stacking assembly relative to the chassis to provide for substantial leveling of the stacking assembly when operating on uneven ground surfaces.

“[T]he stacking section included in the conveyor **66** and the stacking arms on the vertical conveyor of the stacking assembly is mounted on a subframe section **120** separate from the frame section **111** and pivotally connected to the frame section **111** on a pivot pin **121**. The height of the stacking section relative to the frame section **111** can be adjusted by a cylinder **123** under control of the operator standing on the frame **71**. Thus the stacking section can be maintained substantially horizontal relative to a front to rear direction by pivoting action about the horizontal transverse pivot pin **121**.” McLeod/Pisony, p. 24, l-p. 25, l. 6.



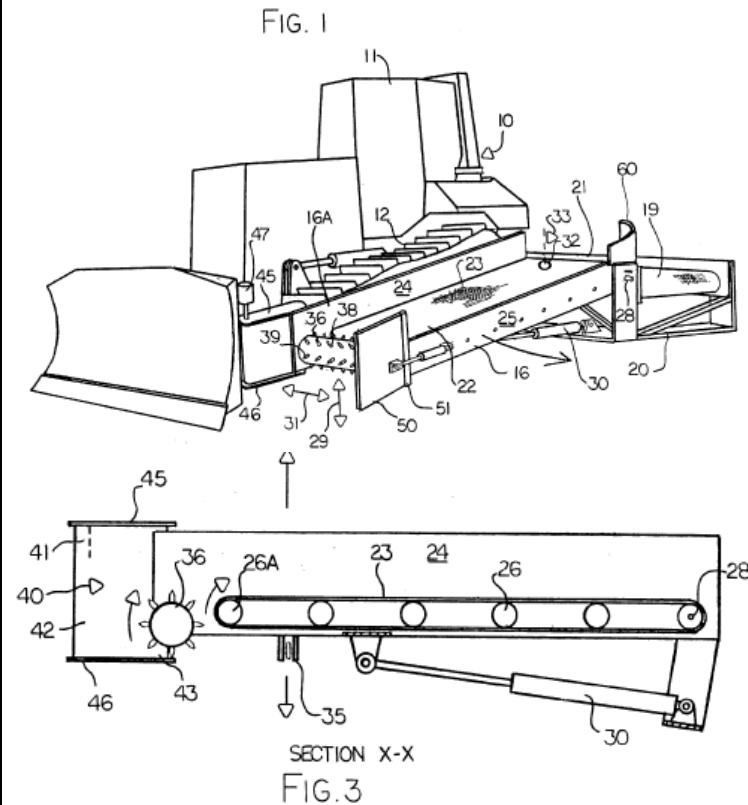
“The apparatus of claim 11 wherein the stacking assembly and the bundling assembly are mounted on a sub-frame portion of the frame which is arranged for pivotal movement relative to the frame and relative to the conveyor about a horizontal axis transverse to the direction of the movement of the vehicle to maintain the stacking assembly and bundling assembly substantially level as the vehicle moves.” McLeod/Pisomy, p. 31, ll. 11-16.

Claim 6

The apparatus of claim 1 wherein the mast includes a hydraulic cylinder drivable to telescope to various lengths.

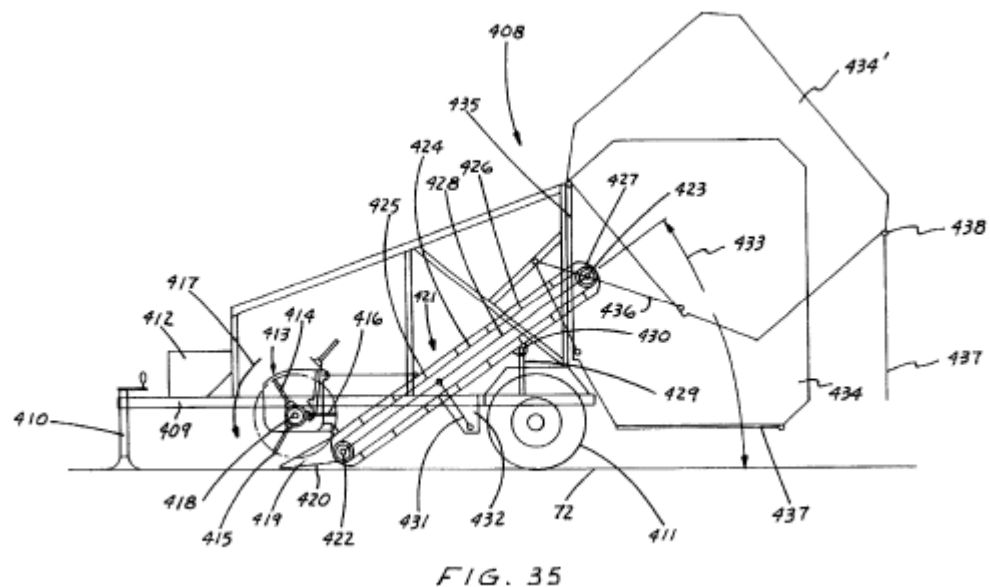
“In U.S. Pat. No. 5,934,861 issued Aug. 10th 1999 to one of the present inventors, which corresponds to Canadian Application 2.241.682 published 26th Feb. 1999, a first proposal was made for a machine which picks up the pieces and conveys them to a transport truck to one side of the machine. While this proposal included a number of basic principles which are used herein and which form the basis of the invention, yet further improvements have been made herein to provide a machine with improved operation and ergonomics.” McLeod/Pisomy, p. 2, ll. 10-16. “The conveyer table **16** is mounted for pivotal movement about a horizontal pivot shaft **28** defining a pivot access adjacent the feed end **17a** for upward and downward vertical movement **29** of the forward end **27** of the conveyer table. Actuation of the vertical movement **29** is effected by a hydraulic drive cylinder **30** connected

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“Referring now to FIG. 54, additional functional details of this arrangement can be appreciated. Several structural features are provided to permit adjustment of the tension of belt 504 and to vary the clearance between the lowest portion 525 of belt 504 and the road surface 517. First, an hydraulic ram 526 extends between the conveyor frame and the vehicle frame bracket 527. Liu, 24:39-46.

